YAMAHA

READ THIS MANUAL CAREFULLY!
It contains important safety information.

OWNER'S MANUAL

GRIZZLY 660

YFM660FAT

⚠ WARNING

This ATV should not be ridden by anyone under 16 years of age.

LIT-11626-18-03

5KM-28199-13

EBU00776

⚠ WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

YAMAHA LIT-CALIF-65-01

EBU00941

INTRODUCTION

Congratulations on your purchase of the Yamaha YFM660FA. It represents the result of many years of Yamaha experience in the production of fine sporting, touring, and pace-setting racing machines. With the purchase of this Yamaha, you can now appreciate the high degree of craftsmanship and reliability that have made Yamaha a leader in these fields.

This manual will provide you with a good basic understanding of the features and operation of this ATV. **This manual includes important safety information. It provides information about special techniques and skills necessary to ride your ATV.** It also includes basic maintenance and inspection procedures. If you have any questions regarding the operation or maintenance of your ATV, please consult a Yamaha dealer.

AN IMPORTANT SAFETY MESSAGE:

- READ THIS MANUAL TOGETHER WITH TIPS FOR THE ATV RIDER CAREFULLY AND COMPLETELY BEFORE OPERATING YOUR ATV. MAKE SURE YOU UNDERSTAND ALL INSTRUCTIONS.
- PAY CLOSE ATTENTION TO THE WARNING AND CAUTION LABELS ON THE ATV.
- NEVER OPERATE AN ATV WITHOUT PROPER TRAINING OR INSTRUCTION. FREE TRAINING IS AVAILABLE TO ANYONE WHO BUYS A NEW ATV. CALL 1-800-887-2887 FOR MORE INFORMATION.
- THIS ATV, AND ANY OTHER ATV OVER 90cc, SHOULD NOT BE RIDDEN BY ANYONE UNDER 16 YEARS OF AGE.

EBU00801

IMPORTANT MANUAL INFORMATION

FAILURE TO FOLLOW THE WARNINGS CONTAINED IN THIS MANUAL CAN RESULT IN SERIOUS INJURY OR DEATH.

Particularly important information is distinguished in this manual by the following notations:

⚠	**The Safety Alert Symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**
⚠ WARNING	**Failure to follow WARNING instructions could result in severe injury or death to the machine operator, a bystander or a person inspecting or repairing the machine.**
CAUTION:	**A CAUTION indicates special precautions that must be taken to avoid damage to the machine.**
NOTE:	A NOTE provides key information to make procedures easier or clearer.

EBU15000

IMPORTANT NOTICE

This ATV is designed and manufactured for OFF-ROAD use only. It is illegal and unsafe to operate this ATV on any public street, road or highway.
This ATV complies with all applicable OFF-ROAD noise level and spark arrester laws and regulations in effect at the time of manufacture.
Please check your local riding laws and regulations before operating this ATV.

EBU00981

AFFIX DEALER

LABEL HERE

YFM660FAT
OWNER'S MANUAL
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P/N LIT-11626-18-03

EBU00014

⚠ WARNING

Indicates a potential hazard that could result in serious injury or death.

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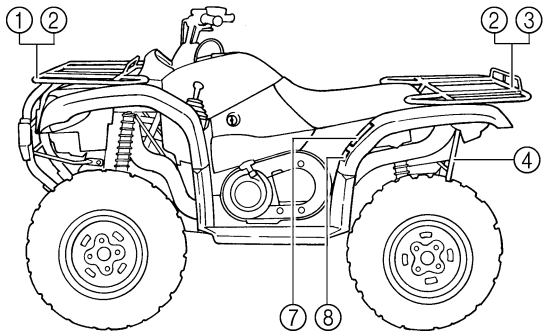
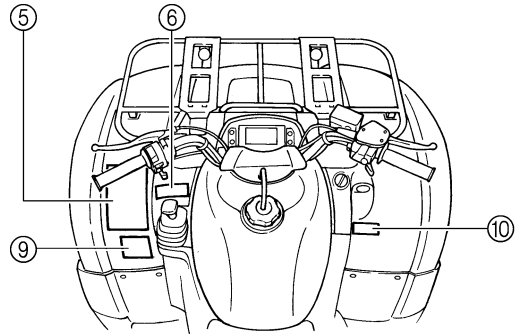
EBU00464

LOCATION OF THE WARNING AND SPECIFICATION LABELS





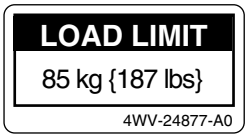
Read and understand all of the labels on your machine. They contain important information for safe and proper operation of your ATV.

Never remove any labels from your ATV. If a label becomes difficult to read or comes off, a replacement label is available from your Yamaha dealer.

①

②

③



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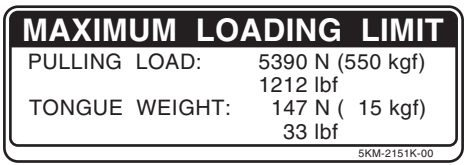


⑤

⚠ WARNING

Improper ATV use can result in SEVERE INJURY or DEATH.

ALWAYS USE AN APPROVED HELMET AND PROTECTIVE GEAR | NEVER USE ON PUBLIC ROADS | NEVER CARRY PASSENGERS | NEVER USE WITH DRUGS OR ALCOHOL

NEVER operate :

- **without proper training or instruction.**
- **at speeds too fast for your skills or the conditions.**
- **on public roads – a collision can occur with another vehicle.**
- **with a passenger – passengers affect balance and steering and increase risk of losing control.**

ALWAYS :

- **use proper riding techniques to avoid vehicle overturns on hills and rough terrain and in turns.**
- **avoid paved surfaces – pavement may seriously affect handling and control.**

LOCATE AND READ OWNER'S MANUAL. FOLLOW ALL INSTRUCTIONS AND WARNINGS.
(For replacement manual, call 1-800-532-1558)

5FE-21568-01

⑥

DRIVE SELECT LEVER

- Read owner's manual carefully before operating.
- ATV MUST be stopped before shifting select lever.
- Shifting info or from reverse or park is impossible without applying rear brake.

5GH-2151E-00

⑦

⚠ WARNING

IMPROPER TIRE PRESSURE OR OVERLOADING CAN CAUSE LOSS OF CONTROL.

LOSS OF CONTROL CAN RESULT IN SEVERE INJURY OR DEATH.

OPERATING TIRE PRESSURE : Set with tires cold

- Recommended : FRONT : 35kPa, {0.35kgf/cm^2}, 5.0psi
  REAR : 30kPa, {0.30kgf/cm^2}, 4.3psi
- Minimum : FRONT : 32kPa, {0.32kgf/cm^2}, 4.6psi
  REAR : 27kPa, {0.27kgf/cm^2}, 3.9psi
- Never set tire pressure below minimum.
  It could cause the tire to dislodge from the rim.

LOADING/TRAILER TOWING

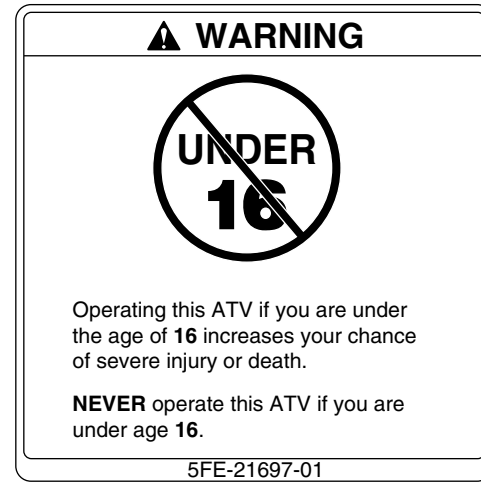
- Cargo or a trailer can affect stability and handling.
  Read owner's manual before loading or towing.
- When loading with cargo or towing a trailer :
  Reduce speed and allow more room to stop.
  Avoid hills and rough terrain.
- Maximum Vehicle Load : 220kg, (485 lbs)
  Includes weight of operator, cargo and accessories (and if applicable, trailer tongue weight).

5KM-21696-00

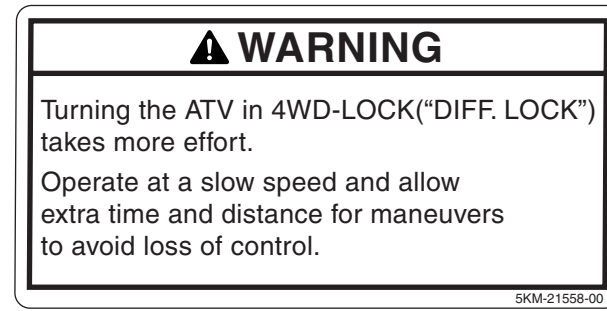
⑧

WARNING
NEVER ride as a passenger.
Passengers can cause a loss of control, resulting in SEVERE INJURY or DEATH.
5FE-2151H-01

⑨


WARNING
UNDER
16
Operating this ATV if you are under the age of 16 increases your chance of severe injury or death.
NEVER operate this ATV if you are under age 16.
5FE-21697-01

⑩


WARNING
Turning the ATV in 4WD-LOCK("DIFF. LOCK") takes more effort.
Operate at a slow speed and allow extra time and distance for maneuvers to avoid loss of control.
5KM-21558-00

EBU01129

SAFETY INFORMATION

AN ATV IS NOT A TOY AND CAN BE HAZARDOUS TO OPERATE. An ATV handles differently from other vehicles including motorcycles and cars. A collision or rollover can occur quickly, even during routine maneuvers such as turning and riding on hills or over obstacles, if you fail to take proper precautions.

SEVERE INJURY OR DEATH can result if you do not follow these instructions:

- Read this manual and all labels carefully and follow the operating procedures described.
- Never operate an ATV without proper training or instruction. **Take a Training Course.** Beginners should receive training from a certified instructor. Contact an authorized ATV dealer or call 1-800-887-2887 to find out about the training courses nearest you.
- Always follow the age recommendation:
  - A child under 16 years old should never operate an ATV with engine size greater than 90cc.
- Never allow a child under age 16 to operate an ATV without adult supervision, and never allow continued use of an ATV by a child if he or she does not have the abilities to operate it safely.
- Never carry passenger on an ATV.
- Always avoid operating an ATV on any paved surfaces, including sidewalks, driveways, parking lots and streets.
- Never operate an ATV on any public street, road or highway, even a dirt or gravel one.

- Never operate an ATV without wearing an approved motorcycle helmet that fits properly. You should also wear eye protection (goggles or face shield), gloves, boots, long-sleeved shirt or jacket, and long pants.
- Never consume alcohol or drugs before or while operating this ATV.
- Never operate at speeds too fast for your skills or the conditions. Always go at a speed that is proper for the terrain, visibility and operating conditions, and your experience.
- Never attempt wheelies, jumps, or other stunts.
- Always inspect your ATV each time you use it to make sure it is in safe operating condition. Always follow the inspection and maintenance procedures and schedules described in this manual.
- Always keep both hands on the handlebars and both feet on the footboards of the ATV during operation.
- Always go slowly and be extra careful when operating on unfamiliar terrain. Always be alert to changing terrain conditions when operating the ATV.
- Never operate on excessively rough, slippery or loose terrain until you have learned and practiced the skills necessary to control the ATV on such terrain. Always be especially cautious on these kinds of terrain.
- Always follow proper procedures for turning as described in this manual. Practice turning at low speeds before attempting to turn at faster speeds. Do not turn at excessive speed.
- Never operate the ATV on hills too steep for the ATV or for your abilities. Practice on smaller hills before attempting larger hills.

- Always follow proper procedures for climbing hills as described in this manual. Check the terrain carefully before you start up any hill. Never climb hills with excessively slippery or loose surfaces. Shift your weight forward. Never open the throttle suddenly. Never go over the top of a hill at high speed.
- Always follow proper procedures for going down hills and for braking on hills as described in this manual. Check the terrain carefully before you start down any hill. Shift your weight backward. Never go down a hill at high speed. Avoid going down a hill at an angle that would cause the vehicle to lean sharply to one side. Go straight down the hill where possible.
- Always follow proper procedures for crossing the side of a hill as described in this manual. Avoid hills with excessively slippery or loose surfaces. Shift your weight to the uphill side of the ATV. Never attempt to turn the ATV around on any hill until you have mastered the turning technique described in this manual on level ground. Avoid crossing the side of a steep hill if possible.
- Always use proper procedures if you stall or roll backwards when climbing a hill. To avoid stalling, use proper gear range and maintain a steady speed when climbing a hill. If you stall or roll backwards, follow the special procedure for braking described in this manual. Dismount on the uphill side or to a side if pointed straight uphill. Turn the ATV around and remount, following the procedure described in this manual.

- Always check for obstacles before operating in a new area. Never attempt to operate over large obstacles, such as large rocks or fallen trees. Always follow proper procedures when operating over obstacles as described in this manual.
- Always be careful when skidding or sliding. Learn to safely control skidding or sliding by practicing at low speeds and on level, smooth terrain. On extremely slippery surfaces, such as ice, go slowly and be very cautious in order to reduce the chance of skidding or sliding out of control.
- Never operate an ATV in fast flowing water or in water deeper than that recommended in this manual. Remember that wet brakes may have reduced stopping ability. Test your brakes after leaving water. If necessary, apply them several times to let friction dry out the linings.
- Always be sure there are no obstacles or people behind you when you operate in reverse. When it is safe to proceed in reverse, go slowly.
- Always use the size and type tires specified in this manual.
- Always maintain proper tire pressure as described in this manual.
- Never modify an ATV through improper installation or use of accessories.
- Never exceed the stated load capacity for an ATV. Cargo should be properly distributed and securely attached. Reduce speed and follow instructions in this manual for carrying cargo or pulling a trailer. Allow greater distance for braking.

FOR MORE INFORMATION ABOUT ATV SAFETY, call the Consumer Products Safety Commission at 1-800-638-2772, or the ATV Distributor's Safety Hotline at 1-800-852-5344.

⚠ WARNING

POTENTIAL HAZARD

Improper handling of gasoline.

WHAT CAN HAPPEN

Gasoline can catch fire and you could be burned.

HOW TO AVOID THE HAZARD

Always turn off the engine when refueling. Do not refuel right after the engine has been running and is still very hot. Do not spill gasoline on the engine or exhaust pipe/muffler when refueling. Never refuel while smoking, or while in the vicinity of sparks, open flames, or other sources of ignition such as the pilot lights of water heaters and clothes dryers.

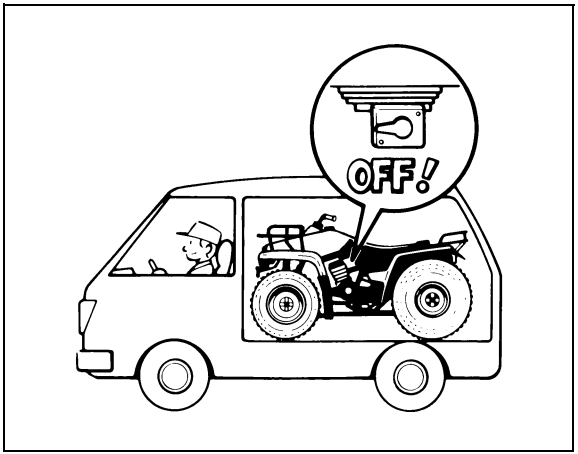
When transporting the ATV in another vehicle, be sure it is kept upright and that the fuel cock is in the "OFF" position. Otherwise, fuel may leak out of the carburetor or fuel tank.

WHAT CAN HAPPEN

Gasoline is poisonous and can cause injuries.

HOW TO AVOID THE HAZARD

If you should swallow some gasoline or inhale a lot of gasoline vapor, or get some gasoline in your eyes, see your doctor immediately. If gasoline spills on your skin, wash with soap and water. If gasoline spills on your clothing, change your clothes.



⚠ WARNING

POTENTIAL HAZARD

Starting or running the engine in a closed area.

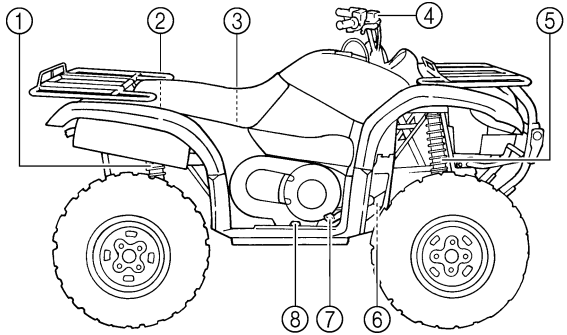
WHAT CAN HAPPEN

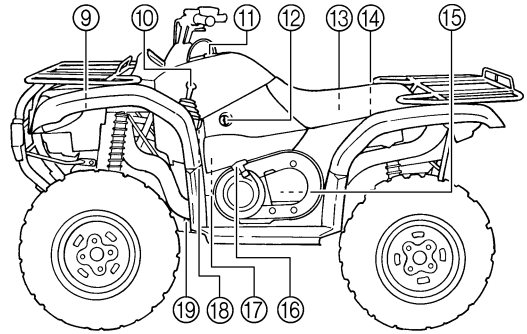
Exhaust fumes are poisonous and may cause loss of consciousness and death within a short time.

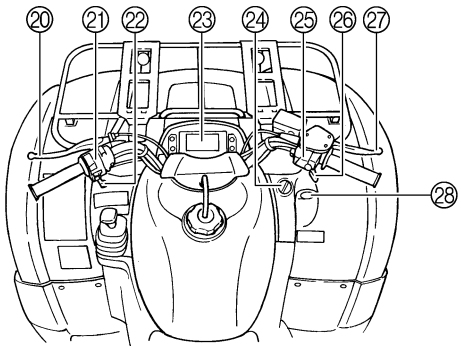
HOW TO AVOID THE HAZARD

Always operate your ATV in an area with adequate ventilation.

DESCRIPTION AND MACHINE IDENTIFICATION







1. Rear shock absorber spring preload adjusting ring
2. Storage compartment and tool kit
3. Air filter case
4. Front brake fluid reservoir
5. Front shock absorber spring preload adjusting ring
6. Rear brake fluid reservoir
7. Brake pedal
8. V-belt case drain plug
9. Radiator cap
10. Drive select lever
11. Fuel tank cap
12. Fuel cock
13. Battery
14. Fuses
15. Engine oil dipstick
16. Recoil starter
17. Coolant reservoir
18. Drive select lever box check hose
19. V-belt cooling duct check hose
20. Rear brake lever
21. Left handlebar switches
22. Starter (choke)
23. Speedometer unit
24. Main switch
25. Right handlebar switches
26. Throttle lever
27. Front brake lever
28. Auxiliary DC jack

NOTE:

The machine you have purchased may differ slightly from those shown in the figures of this manual.

EBU00600

Identification number records

Record the key identification number, vehicle identification number and model label information in the spaces provided for assistance when ordering spare parts from a Yamaha dealer or for reference in case the vehicle is stolen.

1. KEY IDENTIFICATION NUMBER:

2. VEHICLE IDENTIFICATION NUMBER:

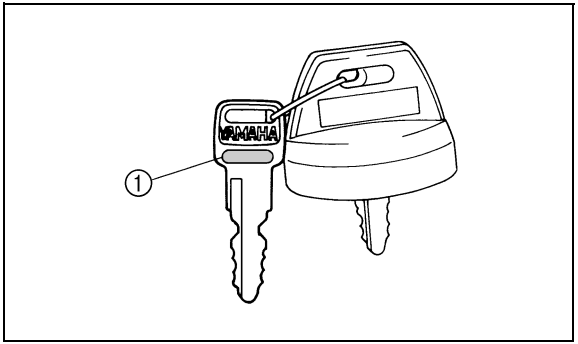
3. MODEL LABEL INFORMATION:

○
●

EBU00035

Key identification number

The key identification number is stamped on the key as shown in the following illustration. This number can be used for ordering a new key.

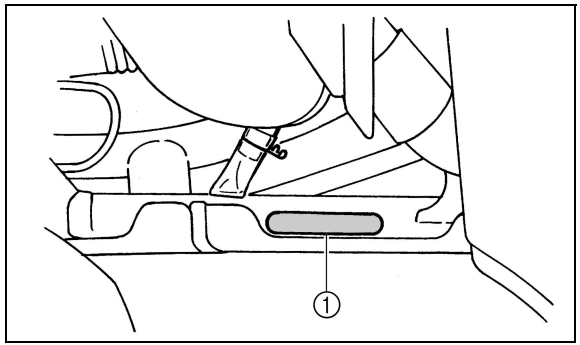


1. Key identification number

EBU00036

Vehicle identification number

The vehicle identification number is stamped into the frame.



1. Vehicle identification number

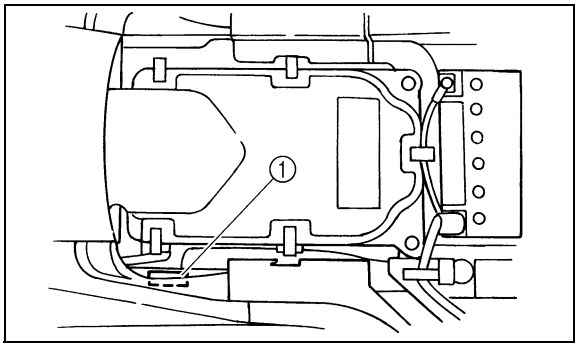
NOTE:

The vehicle identification number is used to identify your machine.

EBU00787

Model label

The model label is affixed to the location in the illustration. Record the information on this label in the space provided. This information will be needed to order spare parts from your Yamaha dealer.



1. Model label

EBU00039

CONTROL FUNCTIONS

⚠ WARNING

Indicates a potential hazard that could result in serious injury or death.

EBU00942

Main switch

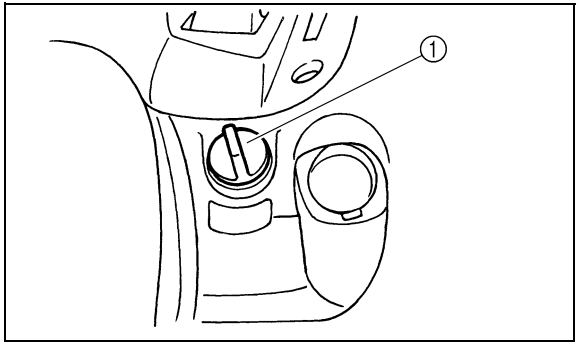
Functions of the respective switch positions are as follows:

ON:

The engine can be started only at this position and the headlights and taillight come on when the light switch is on.

OFF:

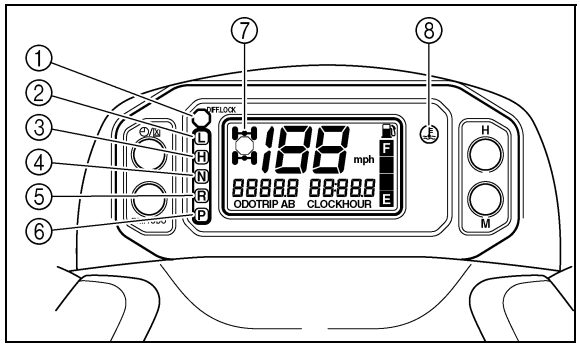
All electrical circuits are switched off. The key can be removed in this position.



1. Main switch

EBU00802

Indicator and warning lights



1. Differential gear lock indicator light “DIFF. LOCK”
2. Low-range indicator light “L”
3. High-range indicator light “H”
4. Neutral indicator light “N”
5. Reverse indicator light “R”
6. Park indicator light “P”
7. Four-wheel-drive indicator “ ”/“ ”
8. Coolant temperature warning light “ ”

EBU10601

Differential gear lock indicator light “DIFF. LOCK”

This indicator light and the differential gear lock indicator in the display come on when the differential gear lock switch is set to the “4WD-LOCK” position.

NOTE:

When the switch is set to “LOCK”, the differential gear lock indicator light will flash until the differential gear is locked.

EBU01122

Low-range indicator light “L”

This indicator light comes on when the drive select lever is in the “L” position.

EBU01064

High-range indicator light “H”

This indicator light comes on when the drive select lever is in the “H” position.

EBU00972

Neutral indicator light “N”

This indicator light comes on when the drive select lever is in the “N” position.

EBU00867

Reverse indicator light “R”

This indicator light comes on when the drive select lever is in the “R” reverse position.

NOTE:

If the indicator light flashes or the speedometer does not show the speed while riding, have a Yamaha dealer check the speed sensor circuit.

EBU00609

Park indicator light “P”

This indicator light comes on when the drive select lever is in the “P” (park) position.

EBU11312

Four-wheel-drive indicator “ ”/“ ”

This indicator comes on when the “2WD”/“4WD” switch is set to the “4WD” position. The differential gear lock indicator “DIFF.LOCK” in the four-wheel-drive indicator also comes on when the “LOCK”-“4WD” switch is set to the “4WD-LOCK” position.

NOTE:

Due to the synchronizing mechanism in the differential gear case, the four-wheel drive indicator may not come on until the ATV starts moving.

EBU00860

Coolant temperature warning light “ ”

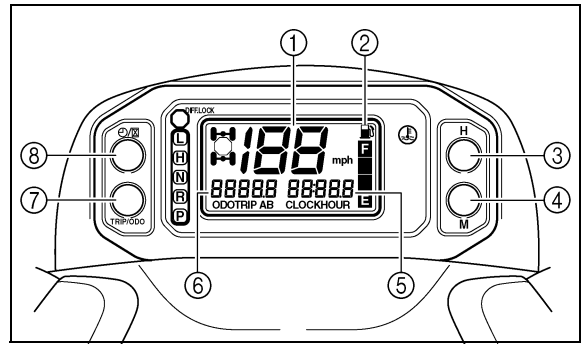
When the coolant temperature reaches a specified level, this light comes on to warn that the coolant temperature is too hot. If the light comes on during operation, stop the engine as soon as it is safe to do so and allow the engine to cool down for about 10 minutes.

CAUTION:

- **The engine may overheat if the ATV is overloaded. If this happens, reduce the load to specification.**
- **After restarting, make sure that the light is out. Continuous use while the light is on may cause damage to the engine.**

EBU15100

Speedometer unit



1. Speedometer
2. Fuel meter
3. “H” button
4. “M” button
5. Clock/Hour meter
6. Odometer/Tripmeter A/Tripmeter B
7. TRIP/ODO button
8. Clock/Hour “ ”/“ ” button

The speedometer unit is equipped with the following:

- a speedometer (which shows the riding speed)
- an odometer (which shows the total distance traveled)
- two tripmeters (which show the distance traveled since they were last set to zero)

- a clock
- an hour meter (which shows the total time the key has been turned to "ON")
- a fuel meter

Odometer and tripmeter modes

Pushing the "TRIP/ODO" button switches the display between the odometer mode "ODO" and the tripmeter modes "A" and "B" in the following order:

ODO→TRIP A→TRIP B→ODO

To reset a tripmeter, select it by pushing the "TRIP/ODO" button, and then push the "TRIP/ODO" button for at least three seconds. The tripmeters can be used to estimate the distance that can be traveled with a full tank of fuel. This information will enable you to plan future fuel stops.

NOTE:

Holding in the "TRIP/ODO" button and then turning the key to "ON" switches the display between "mph" and "km/h".

Clock mode

Pushing the " ◴ "/" ⧖ " button switches the display between the clock mode "CLOCK" and the hour meter mode "HOUR" in the following order:

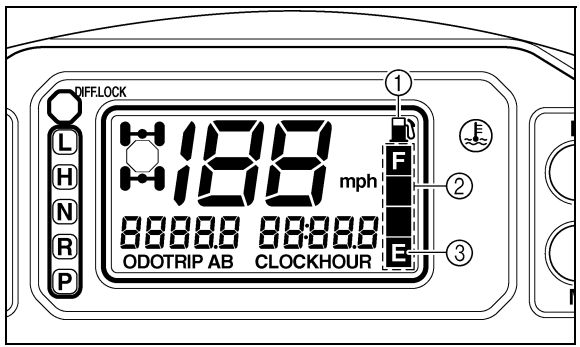
CLOCK→HOUR→CLOCK

To set the clock

1. Set the display to the clock mode.
2. Push the " ◴ "/" ⧖ " button until the clock starts flashing.
3. Set the hours by pushing the "H" button.
4. Set the minutes by pushing the "M" button.
5. Push the " ◴ "/" ⧖ " button, and then release it to start the clock.

Fuel meter

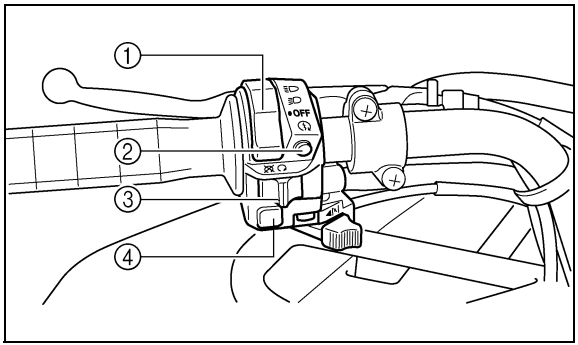
The fuel meter indicates the amount of fuel in the fuel tank. The display segments of the fuel meter disappear towards “E” (Empty) as the fuel level decreases. When the “E” segment disappears and the fuel level warning indicator flashes, set the fuel cock to reserve and refuel as soon as possible.



1. Fuel level warning indicator
2. Fuel meter
3. “E” segment

EBU00053

Handlebar switches



1. Light switch “≣D/≣D/OFF”
2. Start switch “(≋)”
3. Engine stop switch “⊠/◯”
4. Override switch “OVERRIDE”

EBU12040

Light switch “≣D/≣D/OFF”

Set the switch to “≣D” to turn on the low beam and the taillight.

Set the switch to “≣D” to turn on the high beam and the taillight.

Set the switch to “OFF” to turn off all the lights.

CAUTION:

Do not use the headlights with the engine turned off for more than thirty minutes. The battery may discharge to the point that the starter motor will not operate properly. If this should happen, remove the battery and recharge it.

EBU00607

Start switch "⏲"

The starter motor cranks the engine when this switch is pushed.

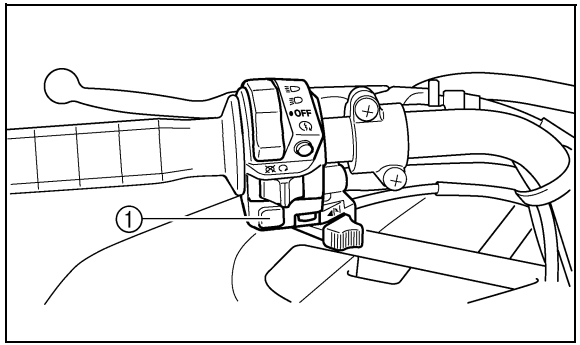
CAUTION:

See starting instructions prior to starting the engine. (See page 6-1 for details.)

EBU12050

Engine stop switch "⊗/⟳"

Make sure that the engine stop switch is set to "⟳" before starting the engine. The engine stop switch controls ignition and can be used at all times to stop the engine, especially in an emergency. The engine will not start or run when the engine stop switch is set to "⊗".

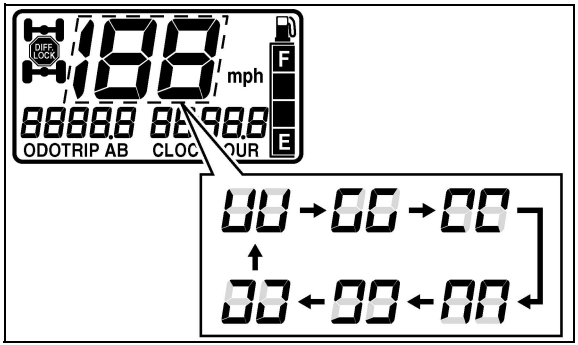


1. Override switch “OVERRIDE”

EBU13781

Override switch “OVERRIDE”

Top speed is normally limited when operating in 4WD-LOCK. If conditions require more engine power when riding forward, push and hold this switch to override the 4WD-LOCK speed limiting function. (See page 4-11 for a detailed explanation about the differential gear lock switch and its function.) Releasing the switch restores the speed limiting function.
While this switch is pushed, the segments of the speedometer digits will appear as shown in the figure.



NOTE:

If the digits of the speedometer appear as shown when the switch is NOT being pushed, this could indicate a malfunction in the electrical system. In this case, take the ATV to a Yamaha dealer at the first opportunity.

⚠ WARNING

POTENTIAL HAZARD

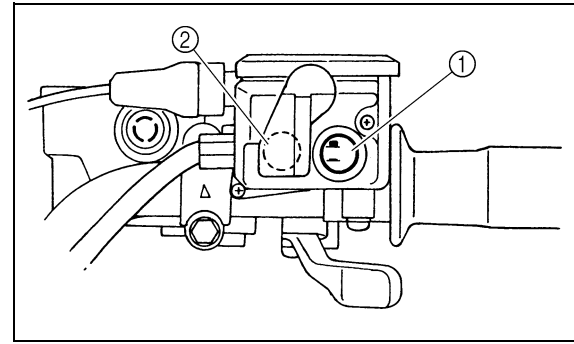
Riding too fast while the ATV is in 4WD-LOCK.

WHAT CAN HAPPEN

All wheels turn at the same speed when the differential is locked, so it takes more effort to turn the ATV. The amount of effort is more the faster you go. You may lose control and have an accident if you cannot make a sharp enough turn for the speed you are traveling.

HOW TO AVOID THE HAZARD

Always ride at a slow speed when the ATV is in 4WD-LOCK, and allow extra time and distance for maneuvers.



1. On-Command four-wheel drive switch “2WD”/“4WD”
2. Differential gear lock switch “LOCK”/“4WD”

EBU14091

On-Command four-wheel drive and differential gear lock switches

This ATV is equipped with an On-Command four-wheel drive switch “2WD”/“4WD” and a differential gear lock switch “LOCK”/“4WD”. Select the appropriate drive according to terrain and the conditions.

- Two-wheel drive (2WD): Power is supplied to the rear wheels only.

- Four-wheel drive (4WD): Power is supplied to the rear and front wheels.
- Four-wheel drive with the differential gear locked (4WD-LOCK): Power is supplied to the rear and front wheels when the differential gear is locked ("DIFF.LOCK"). Unlike the 4WD mode, all wheels turn at the same speed.

⚠ WARNING

POTENTIAL HAZARD

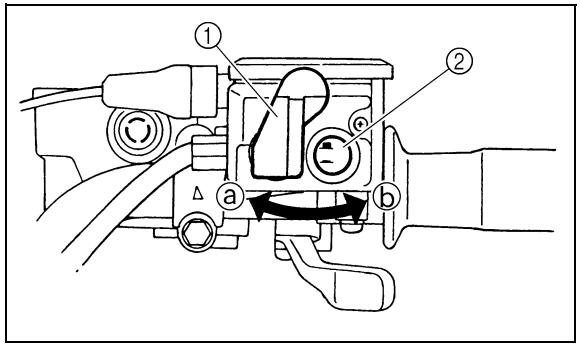
Changing from 2WD to 4WD or from 4WD to 4WD-LOCK ("DIFF.LOCK"), or vice-versa while the ATV is moving.

WHAT CAN HAPPEN

The ATV handles differently in 2WD than in 4WD and in 4WD-LOCK in some circumstances. Changing from 2WD to 4WD or from 4WD to 4WD-LOCK, or vice-versa while moving may cause the ATV to unexpectedly handle differently. This could distract the operator and increase the risk of losing control and an accident.

HOW TO AVOID THE HAZARD

Always stop the ATV before changing from 2WD to 4WD or from 4WD to 4WD-LOCK, or vice-versa.

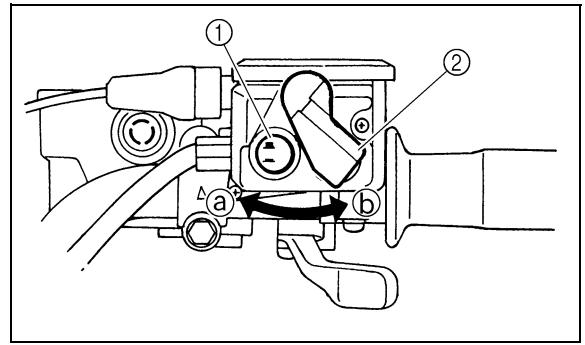


1. Lever
2. On-Command four-wheel drive switch “2WD”/“4WD”

On-Command four-wheel drive switch “2WD”/“4WD”

To change from 2WD to 4WD, stop the ATV, and then set the switch to “4WD”. When the ATV is in 4WD, the 4WD indicator “ ” will come on in the speedometer unit display.

To change from 4WD to 2WD, stop the ATV, be sure the lever is set to position ⓐ, and then set the switch to “2WD”.



1. Differential gear lock switch “LOCK”/“4WD”
2. Lever

Differential gear lock switch “LOCK”/“4WD”

To lock the differential gear in 4WD, make sure the On-Command four-wheel-drive switch is set to “4WD”, stop the ATV, move the lever to position ⓑ, and then set the switch to “LOCK”. When the differential gear is locked, the differential gear lock indicator (“DIFF.LOCK”) light will come on along with the indicator “ ” in the speedometer unit display.

To release the differential gear lock, stop the ATV and set the switch to “4WD”.

⚠ WARNING

POTENTIAL HAZARD

Riding too fast while the ATV is in 4WD-LOCK.

WHAT CAN HAPPEN

All wheels turn at the same speed when the differential is locked, so it takes more effort to turn the ATV. The amount of effort is more the faster you go. You may lose control and have an accident if you cannot make a sharp enough turn for the speed you are traveling.

HOW TO AVOID THE HAZARD

Always ride at a slow speed when the ATV is in 4WD-LOCK, and allow extra time and distance for maneuvers.

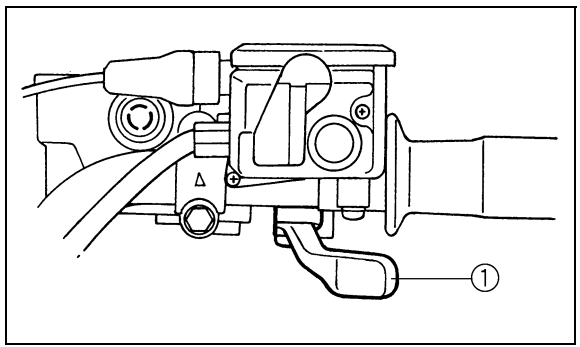
NOTE:

- When the switch is set to "LOCK", the differential gear lock indicator light will flash until the differential gear is locked.
- When the indicator light is flashing, turning the handlebar back and forth will help the differential gear lock to engage.
- Riding before the differential gear lock is properly engaged (e.g., when the indicator light is flashing) will cause the engine speed to be limited until engagement is complete.
- When the ATV is in 4WD-LOCK, the maximum traveling speed is limited to 35 km/h (22 mph). However, if conditions require full engine power to be available, push and hold the override switch to disable the 4WD-LOCK speed limiter. (See page 4-8 for a detailed explanation of this switch.)

EBU00062

Throttle lever

Once the engine is running, movement of the throttle lever will increase the engine speed. Regulate the speed of the machine by varying the throttle position. Because the throttle is spring-loaded, the machine will decelerate, and the engine will return to an idle any time the hand is removed from the throttle lever.



1. Throttle lever

Before starting the engine, check the throttle to be sure it is operating smoothly. Make sure it returns to the idle position as soon as the lever is released.

⚠ WARNING

POTENTIAL HAZARD

Malfunction of throttle.

WHAT CAN HAPPEN

The throttle could be hard to operate, making it difficult to speed up or slow down when you need to. This could cause an accident.

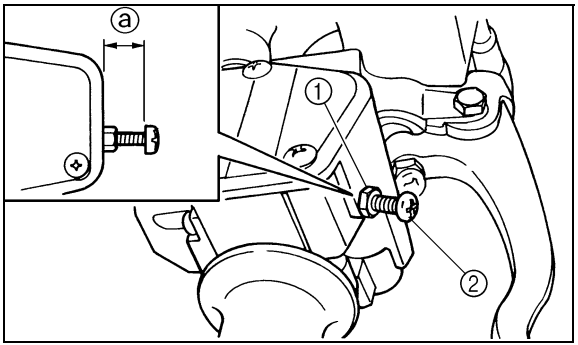
HOW TO AVOID THE HAZARD

Check the operation of the throttle lever before you start the engine. If it does not work smoothly, check for the cause. Correct the problem before riding the ATV. Consult a Yamaha dealer if you can't find or solve the problem yourself.

EBU11590

Speed limiter

The speed limiter keeps the throttle from fully opening, even when the throttle lever is pushed to the maximum. Turning in the adjusting screw limits the maximum engine power available and decreases the maximum speed of the ATV.



1. Locknut
2. Adjusting screw

a. 12 mm (0.47 in)

⚠ WARNING

POTENTIAL HAZARD

Improper adjustment of the speed limiter and throttle.

WHAT CAN HAPPEN

The throttle cable could be damaged. Improper throttle operation could result. You could lose control, have an accident or be injured.

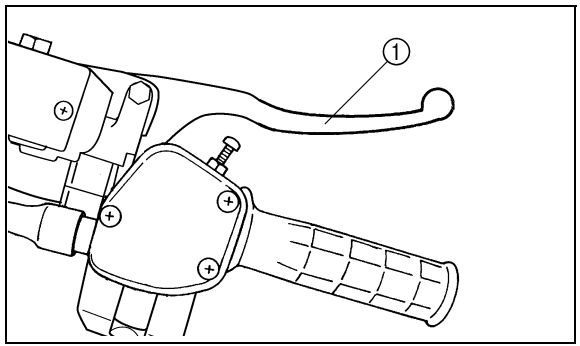
HOW TO AVOID THE HAZARD

Do not turn the adjusting screw out more than 12 mm (0.47 in). Always make sure the throttle lever free play is adjusted to 3–5 mm (0.12–0.20 in). See page 8-42.

EBU00070

Front brake lever

The front brake lever is located on the right handlebar. Pull it toward the handlebar to apply the front brake.

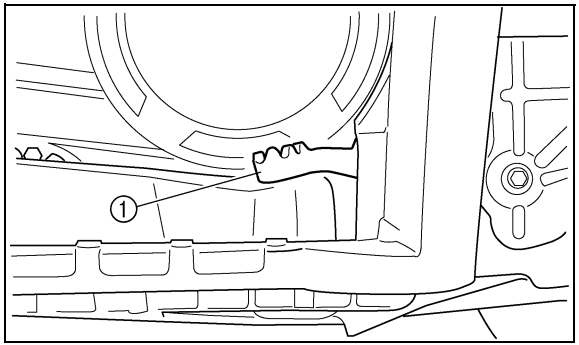


1. Front brake lever

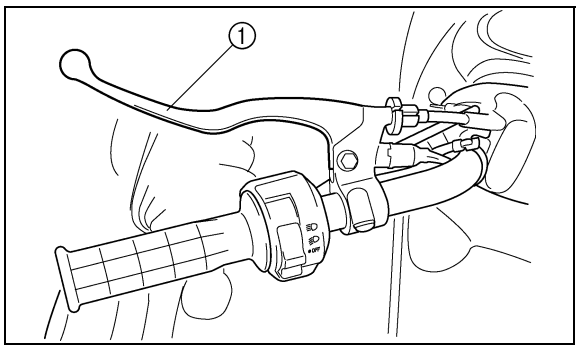
EBU00732

Brake pedal and rear brake lever

The brake pedal is located on the right side of the ATV and the rear brake lever is located on the left handlebar. Push down on the pedal or pull the lever toward the handlebar to apply the rear brake.



1. Brake pedal

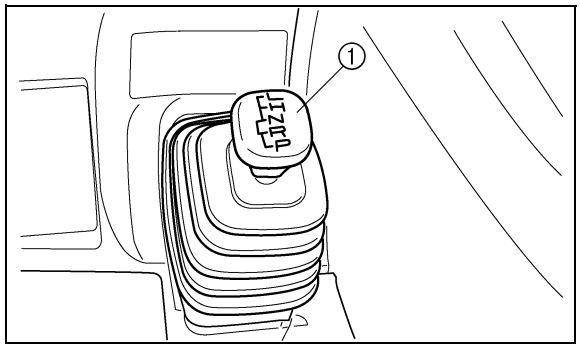


1. Rear brake lever

EBU00608

Drive select lever

The drive select lever is used to shift your machine into the low, high, neutral, reverse and park positions. (Refer to page 6-4 for the drive select lever operation.)

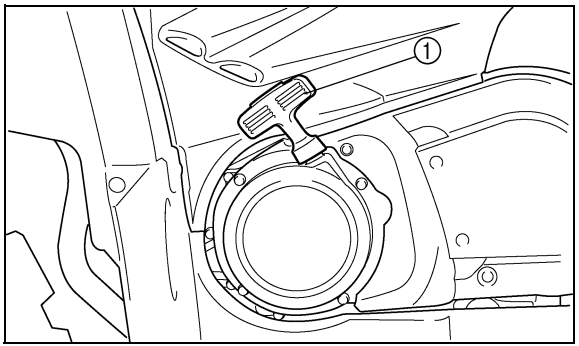


1. Drive select lever

EBU00855

Recoil starter

Firmly grasp the handle and pull slightly until engagement can be felt. Then pull forcefully, being careful not to pull the rope all the way out.



1. Recoil starter

⚠ WARNING

POTENTIAL HAZARD

Starting the engine without setting the drive select lever to the park position "P".

WHAT CAN HAPPEN

The ATV could start to move unexpectedly, which could cause an accident.

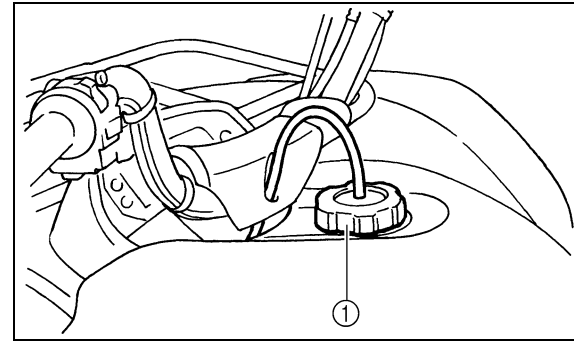
HOW TO AVOID THE HAZARD

Set the drive select lever to the park position before starting the engine.

EBU00092

Fuel tank cap

Remove the fuel tank cap by turning it counterclockwise.



1. Fuel tank cap

EBU00093

Fuel cock

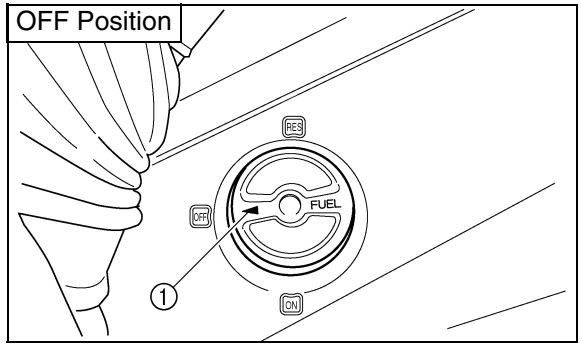
The fuel cock supplies fuel from the fuel tank to the carburetor.

The fuel cock has three positions.

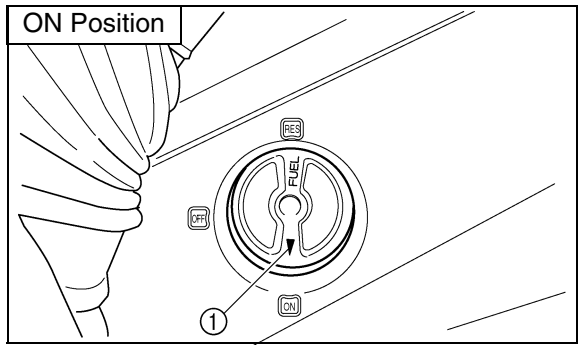
OFF: With the lever in this position fuel will not flow. Always turn the lever to this position when the engine is not running.

ON: With the lever in this position, fuel flows to the carburetor. Normal riding is done with the lever in this position.

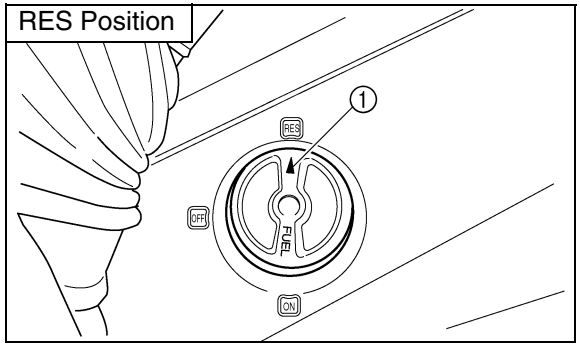
RES: This indicates reserve. If you run out of fuel while riding, turn the lever to this position. THEN FILL THE FUEL TANK AT THE FIRST OPPORTUNITY. After refuelling, return the fuel cock lever to the “ON” position.



1. Arrow mark



1. Arrow mark



1. Arrow mark

EBU00095

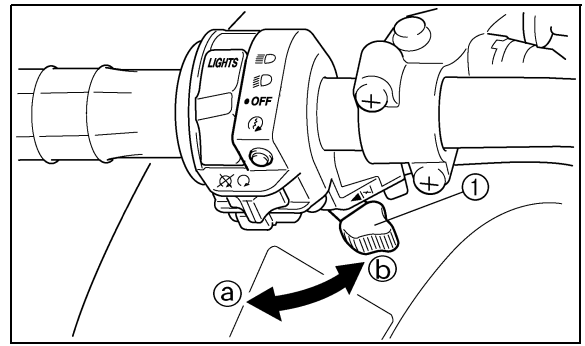
Starter (choke) “ ◀ |↖| ”

Starting a cold engine requires a richer air-fuel mixture. A separate starter circuit supplies this mixture.

Move in direction ⓐ to turn on the starter (choke).

Move in direction ⓑ to turn off the starter (choke).

Refer to “Starting a cold engine” for proper operation. (See page 6-1.)

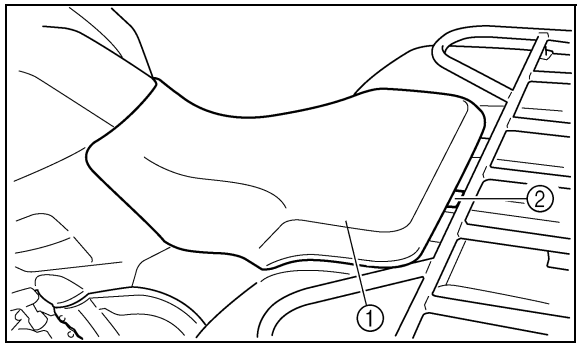


1. Starter (choke) “ ◀ |↖| ”

EBU00567

Seat

To remove the seat, pull the seat lock lever upward and pull up the seat at the rear.

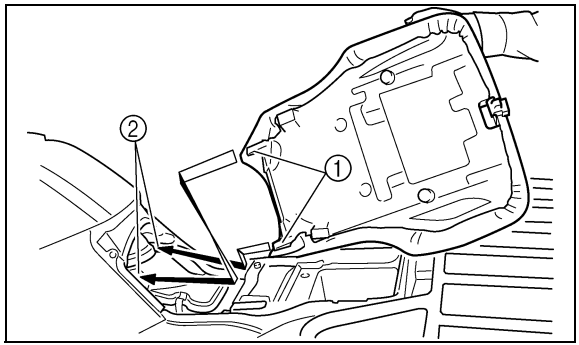


1. Seat
2. Seat lock lever

To install the seat, insert the projections on the front of the seat into the seat holders and push down on the seat at the rear.

NOTE:

Make sure that the seat is securely fitted.



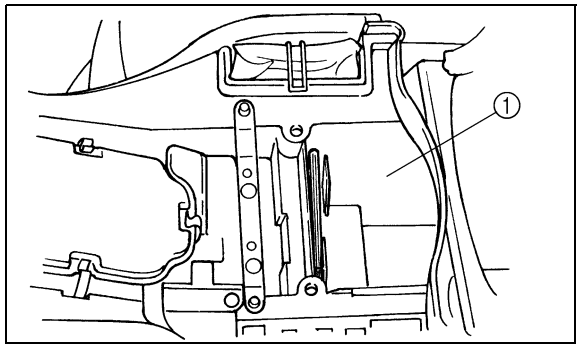
1. Projection (× 2)
2. Seat holder (× 2)

EBU00858

Storage compartment

The storage compartment is located under the seat. (See page 4-20 for seat removal and installation procedures.)

When storing the owner's manual or other documents in the storage compartment, be sure to wrap them in a plastic bag so that they will not get wet. When washing the ATV, be careful not to let any water enter the storage compartment.



1. Storage compartment

EBU00582

Front carrier

Maximum load limit: 45 kg (99 lb)

EBU00583

Rear carrier

Maximum load limit: 85 kg (187 lb)

EBU01124

Front and rear shock absorber adjustment

The spring preload can be adjusted to suit the rider's weight and riding conditions.

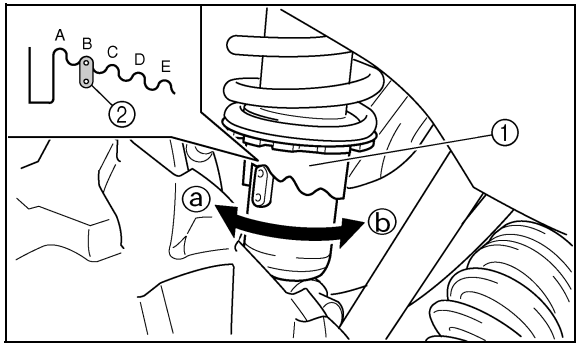
NOTE:

When adjusting the rear shock absorbers, the rear wheels need to be removed. (See pages 8-53–8-54 for removal and installation procedures.)

Adjust the spring preload as follows.

To increase the spring preload, turn the adjusting ring in direction ⓐ.

To decrease the spring preload, turn the adjusting ring in direction ⓑ.

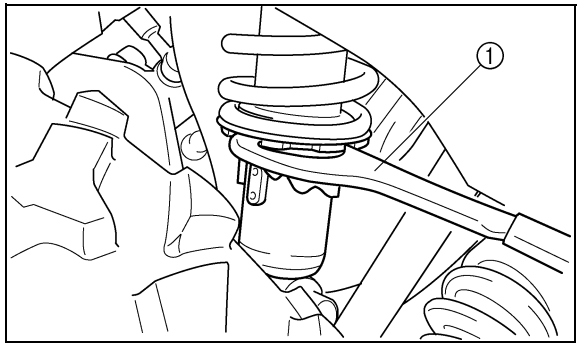


1. Spring preload adjusting ring 2. Position indicator

NOTE:

A special wrench can be obtained at a Yamaha dealer to make this adjustment.

Standard position: B
A- Minimum (soft)
E- Maximum (hard)



1. Special wrench

⚠ WARNING

POTENTIAL HAZARD

Improper shock absorber adjustment.

WHAT CAN HAPPEN

Uneven adjustment can cause poor handling and loss of stability, which could lead to an accident.

HOW TO AVOID THE HAZARD

Always adjust the shock absorbers on the left and right side to the same setting.

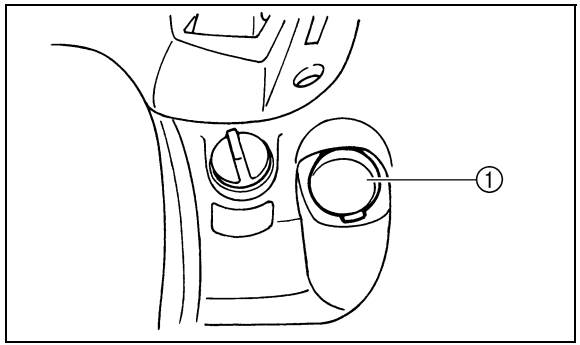
EBU01002

Auxiliary DC jack

The auxiliary DC jack is located at the front right side of the ATV.

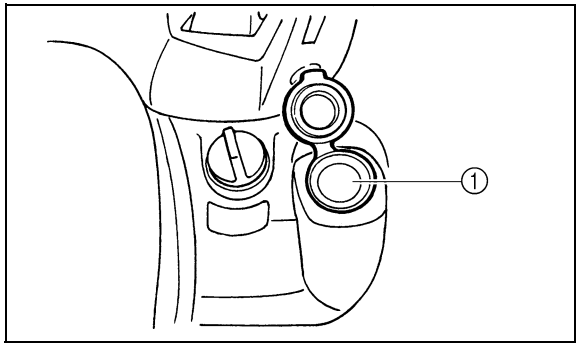
The auxiliary DC jack can be used for suitable work lights, radios, etc.

The auxiliary DC jack should only be used when the engine is running.



1. Auxiliary DC jack cap

1. Set the light switch to “OFF”.
2. Start the engine. (See pages 6-1–6-3.)
3. Open the auxiliary DC jack cap, and then insert the accessory power plug into the jack.



1. Auxiliary DC jack

Maximum rated capacity for the auxiliary DC jack:
DC 12 V, 120 W (10 A)

4. When the auxiliary DC jack is not being used, cover it with the cap.

CAUTION:

- **Do not use accessories requiring more than the above maximum capacity. This may overload the circuit and cause the fuse to blow.**
- **If accessories are used without the engine running or with the headlights turned on, the battery will lose its charge and engine starting may become difficult.**
- **Do not use an automotive cigarette lighter or other accessories with a plug that gets hot because the jack can be damaged.**

EBU00112

⚠ WARNING

Indicates a potential hazard that could result in serious injury or death.

PRE-OPERATION CHECKS

Before using this machine, check the following points:

ITEM	ROUTINE	PAGE
Brakes	• Check operation, free play, fluid level and fluid leakage. • Fill with DOT 4 brake fluid if necessary.	5-3–5-4, 8-43–8-50
Fuel	• Check fuel level. • Fill with fuel if necessary.	5-5–5-6
Engine oil	• Check oil level. • Fill with oil if necessary.	5-7, 8-15–8-20
Coolant reservoir tank	• Check coolant level in reservoir. • Fill with coolant if necessary.	5-9, 8-25–8-30
Final gear oil/ Differential gear oil	• Check for leakage.	5-7–5-8, 8-21–8-25
Throttle	• Check for proper throttle cable operation and free play.	5-10, 8-42
Wheels and tires	• Check tire pressure, wear and damage.	5-11–5-14, 8-53–8-54
Fittings and fasteners	• Check all fittings and fasteners.	5-10
Lights and switches	• Check for proper operation.	5-10, 8-58–8-61
Axle boots	• Check for damage.	8-31

⚠ WARNING

POTENTIAL HAZARD

Failure to inspect the ATV before operating.

Failure to properly maintain the ATV.

WHAT CAN HAPPEN

Increases the possibility of an accident or equipment damage.

HOW TO AVOID THE HAZARD

Always inspect your ATV each time you use it to make sure the ATV is in safe operating condition.

Always follow the inspection and maintenance procedures and schedules described in the Owner's Manual.

EBU11011

Front and rear brakes

Brake levers and brake pedal

- Check that there is no free play in the front brake lever. If there is free play, have a Yamaha dealer adjust it.
- Check for correct free play in the rear brake lever. If the free play is incorrect, adjust it. (See page 8-48.)
- Check for correct brake pedal height. If the pedal height is incorrect, have a Yamaha dealer adjust it.
- Check the operation of the brake levers and pedal. They should move smoothly and there should be a firm feeling when the brakes are applied. If not, have a Yamaha dealer inspect the brake system.

Brake fluid level

Check the brake fluid level. Add fluid if necessary. (See pages 8-44–8-46.)

Recommended brake fluid: DOT 4

Brake fluid leakage

Check to see if any brake fluid is leaking out of the pipe joints or brake fluid reservoirs. Apply the brakes firmly for one minute. If the lever moves slowly inward, there may be a leak in the brake system. If there is any leakage, the brake system should be inspected by a Yamaha dealer.

Brake operation

Test the brakes at slow speed after starting out to make sure they are working properly. If the brakes do not provide proper braking performance, inspect the brake pads for wear. (See page 8-43.)

⚠ WARNING

POTENTIAL HAZARD

Riding with improperly operating brakes.

WHAT CAN HAPPEN

You could lose braking ability, which could lead to an accident.

HOW TO AVOID THE HAZARD

Always check the brakes at the start of every ride. Do not ride the ATV if you find any problem with the brakes. If a problem cannot be corrected by the adjustment procedures provided in this manual, have a Yamaha dealer check for the cause.

EBU01085

Fuel

Make sure there is sufficient gasoline in the tank.

Recommended fuel:
UNLEADED GASOLINE ONLY
Fuel tank capacity:
Total:
20 L (4.40 Imp gal, 5.28 US gal)
Reserve:
3.5 L (0.77 Imp gal, 0.92 US gal)

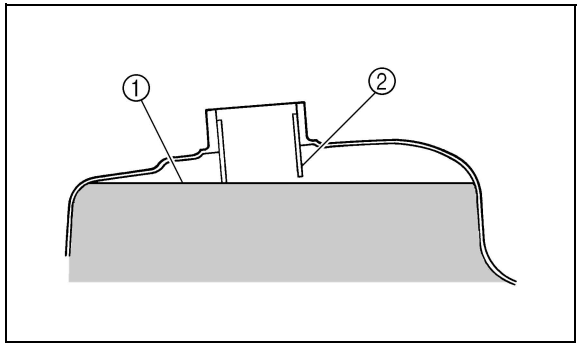
CAUTION:

Use only unleaded gasoline. The use of leaded gasoline will cause severe damage to internal engine parts, such as the valves and piston rings, as well as to the exhaust system.

Your Yamaha engine has been designed to use regular unleaded gasoline with a pump octane number ([R+M]/2) of 86 or higher, or research octane number of 91 or higher. If knocking or pinging occurs, use a different brand of gasoline or premium unleaded fuel. Unleaded fuel will give you longer spark plug life and reduced maintenance cost.

Gasohol

There are two types of gasohol; gasohol containing ethanol and that containing methanol. Gasohol containing ethanol can be used if ethanol content does not exceed 10%. Gasohol containing methanol is not recommended by Yamaha because it may cause fuel system damage or vehicle performance problems.



1. Fuel level
2. Fuel tank filler tube

⚠ WARNING

POTENTIAL HAZARD

Improper care when refueling.

WHAT CAN HAPPEN

Fuel can spill, which can cause a fire and severe injury.

Fuel expands when it heats up. If the fuel tank is overfilled, fuel could spill out due to heat from the engine or the sun.

HOW TO AVOID THE HAZARD

Do not overfill the fuel tank. Be careful not to spill fuel, especially on the engine or exhaust pipe. Wipe up any spilled fuel immediately. Be sure the fuel tank cap is closed securely.

Do not refuel right after the engine has been running and is still very hot.

EBU10842

Engine oil

Make sure the engine oil is at the specified level. Add oil as necessary. (See pages 8-15–8-20.)

CAUTION:

- **In order to prevent clutch slippage (since the engine oil also lubricates the clutch), do not mix any chemical additives. Do not use oils with a diesel specification of "CD" or oils of a higher quality than specified. In addition, do not use oils labeled "ENERGY CONSERVING II" or higher.**
- **Make sure that no foreign material enters the crankcase.**

Recommended engine oil type and quantity:
See page 10-2.

EBU00493

Final gear oil

Make sure the final gear oil is at the specified level. Add oil as necessary. (See pages 8-21–8-22 for details.)

Recommended oil:
SAE 80 API GL-4 Hypoid gear oil

If desired, an SAE 80W90 hypoid gear oil may be used for all conditions.

NOTE:

GL-4 is a quality and additive rating, GL-5 or GL-6 rated hypoid gear oils may also be used.

EBU00678

Differential gear oil

Make sure the differential gear oil is at the specified level. Add oil as necessary. (See pages 8-23–8-25 for details.)

Recommended oil:
SAE 80 API GL-4 Hypoid gear oil

EBU12530

Coolant

Check the coolant level in the coolant reservoir when the engine is cold. (The coolant level will vary with engine temperature.) The coolant level is satisfactory if it is between the minimum and maximum level marks on the coolant reservoir. If the coolant level is at or below the minimum level mark, add distilled water to bring the level up to maximum level mark. Change the coolant every two years. (See pages 8-25–8-30 for details.)

CAUTION:

Hard water or salt water is harmful to the engine. You may use soft water if you cannot get distilled water.

Coolant reservoir capacity
(up to the maximum level mark):
0.3 L (0.26 Imp qt, 0.32 US qt)

⚠ WARNING

POTENTIAL HAZARD

Removing the radiator cap when the engine and radiator are still hot.

WHAT CAN HAPPEN

You could be burned by hot fluid and steam blown out under pressure.

HOW TO AVOID THE HAZARD

Wait for the engine to cool before removing the radiator cap. Always use a thick rag over the cap. Allow any remaining pressure to escape before completely removing the cap.

EBU01083

Throttle lever

Check to see that the throttle lever operates correctly. It must open smoothly and spring back to the idle position when released. Have a Yamaha dealer repair as necessary for proper operation.

EBU11620

Fittings and fasteners

Always check the tightness of chassis fittings and fasteners before a ride. Take the machine to a Yamaha dealer or refer to the Service Manual for correct tightening torque.

EBU10030

Lights

Check the headlights and tail/brake light to make sure they are in working condition. Repair as necessary for proper operation.

EBU11700

Switches

Check the operation of all switches. Have a Yamaha dealer repair as necessary for proper operation.

EBU00157

Tires

⚠ WARNING

POTENTIAL HAZARD

Operating this ATV with improper tires, or with improper or uneven tire pressure.

WHAT CAN HAPPEN

Use of improper tires on this ATV, or operation of this ATV with improper or uneven tire pressure, may cause loss of control, increasing your risk of accident.

HOW TO AVOID THE HAZARD

1. **The tires listed below have been approved by Yamaha Motor Co., Ltd. for this model. Other tire combinations are not recommended.**

	Manufacturer	Size	Type
Front	DUNLOP	AT25 × 8-12	KT131
Rear	DUNLOP	AT25 × 10-12	KT135

2. **The tires should be set to the recommended pressure:**

- **Recommended tire pressure**
  Front 35 kPa (0.35 kgf/cm^2, 5.0 psi)
  Rear 30 kPa (0.30 kgf/cm^2, 4.3 psi)
- **Check and adjust tire pressures when the tires are cold.**
- **Tire pressures must be equal on both sides.**

3. **Tire pressure below the minimum specified could cause the tire to dislodge from the rim under severe riding conditions.**
   The following are minimums:
   Front 32 kPa (0.32 kgf/cm^2, 4.6 psi)
   Rear 27 kPa (0.27 kgf/cm^2, 3.9 psi)

4. Use no more than the following pressures when seating the tire beads.

Front 250 kPa (2.5 kgf/cm^2, 36 psi)

Rear 250 kPa (2.5 kgf/cm^2, 36 psi)

Higher pressures may cause the tire to burst. Inflate the tires very slowly and carefully. Fast inflation could cause the tire to burst.

EBU00159

How to measure tire pressure

Use the low-pressure tire gauge.

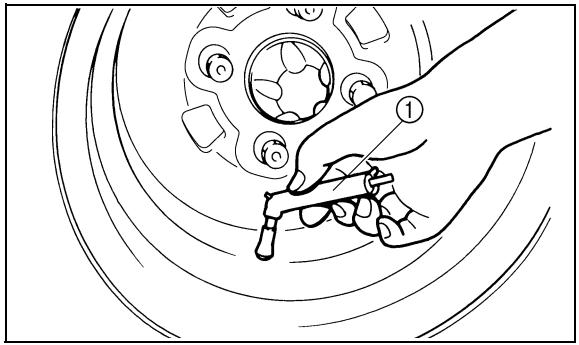
NOTE:

The low-pressure tire gauge is included as standard equipment. Make two measurements of the tire pressure and use the second reading. Dust or dirt in the gauge could cause the first reading to be incorrect.

Set pressure with tires cold.

Set tire pressures to the following specifications:

	Recommended pressure	Minimum	Maximum
Front	35 kPa (0.35 kgf/cm^2, 5.0 psi)	32 kPa (0.32 kgf/cm^2, 4.6 psi)	38 kPa (0.38 kgf/cm^2, 5.4 psi)
Rear	30 kPa (0.30 kgf/cm^2, 4.3 psi)	27 kPa (0.27 kgf/cm^2, 3.9 psi)	33 kPa (0.33 kgf/cm^2, 4.7 psi)

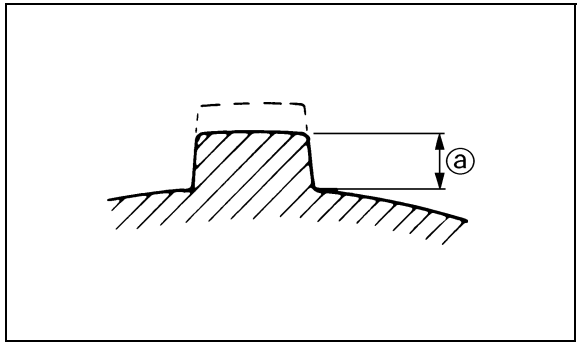


1. Low-pressure tire gauge

EBU00160

Tire wear limit

When the tire groove decreases to 3 mm (0.12 in) due to wear, replace the tire.



a. Tire wear limit

EBU00161

OPERATION

⚠ WARNING

Indicates a potential hazard that could result in serious injury or death.

⚠ WARNING

POTENTIAL HAZARD

Operating ATV without being familiar with all controls.

WHAT CAN HAPPEN

Loss of control, which could cause an accident or injury.

HOW TO AVOID THE HAZARD

Read the Owner's Manual carefully. If there is a control or function you do not understand, ask your Yamaha dealer.

EBU15110

Starting a cold engine

⚠ WARNING

POTENTIAL HAZARD

Freezing control cables in cold weather.

WHAT CAN HAPPEN

You could be unable to control the ATV, which could lead to an accident or collision.

HOW TO AVOID THE HAZARD

When riding in cold weather, always make sure all control cables work smoothly before you begin riding.

1. Apply the rear brake lever or brake pedal.
2. Turn the fuel cock to "ON".
3. Turn the main switch to "ON" and the engine stop switch to "◯".
4. Shift the drive select lever into the neutral or park position.

NOTE:

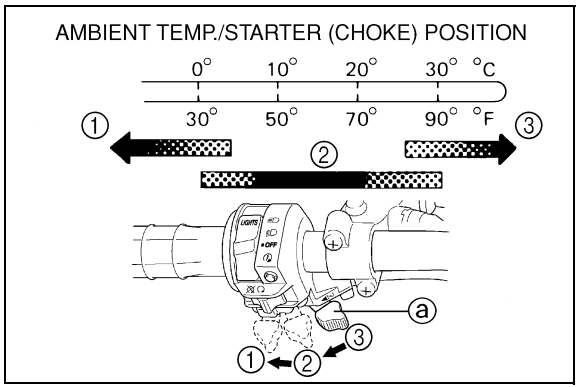
- When the drive select lever is in the neutral or park position, if either indicator light does not come on, ask a Yamaha dealer to inspect the respective electric circuit.
- The engine can be started in any gear if the rear brake lever or brake pedal is applied. However, it is recommended to shift into neutral or park before starting the engine.

5. Use the starter (choke) in reference to the figure:

Position ① : Cold engine start-
ambient temperature below 5 °C (40 °F).

Position ② : Cold engine start-
ambient temperature at 0 °C (30 °F)–30 °C (90 °F) and warming up position.

Position ③ : Cold engine start-
ambient temperature above 25 °C (80 °F) and warm engine start position.



a. Starter (choke)
1. Fully open
2. Half open
3. Closed

6. Completely close the throttle lever and start the engine by pushing the start switch.

NOTE:

- If the engine fails to start, release the start switch, then push the start switch again. Pause a few seconds before the next attempt. Each cranking should be as short as possible to preserve battery energy. Do not crank the engine more than 10 seconds on each attempt.
- If the battery is discharged, pull the recoil starter to start the engine.

7. If the engine is started with the starter (choke) in position ①, the starter (choke) should be returned to position ② to warm up the engine. If the engine is started with the starter (choke) in position ②, keep the starter (choke) in this position to warm up the engine.
8. Continue warming up the engine until it idles smoothly and return the starter (choke) to position ③ before riding.

CAUTION:

See the "Engine break-in" section prior to operating the engine for the first time.

EBU00180

Starting a warm engine

To start a warm engine, refer to the "Starting a cold engine" section. The starter (choke) should not be used. The throttle should be opened slightly.

EBU00182

Warming up

To get maximum engine life, always warm up the engine before starting off. Never accelerate hard with a cold engine! To see whether or not the engine is warm, check if it responds to the throttle normally with the starter (choke) turned off.

EBU08461

Drive select lever operation and reverse driving

CAUTION:

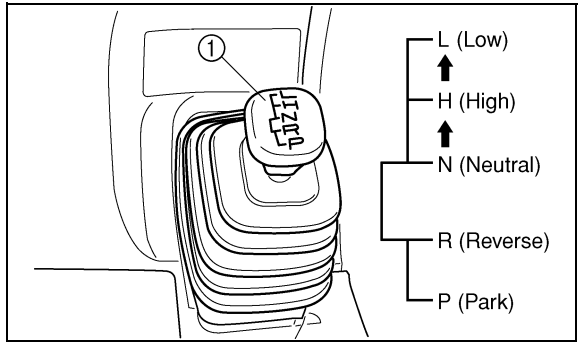
Before shifting, you must stop the ATV and return the throttle lever to the closed position, otherwise the transmission may be damaged.

Shifting: Neutral to High and High to Low

1. Bring the ATV to a complete stop and return the throttle lever to the closed position.
2. Apply the brakes, then shift by moving the drive select lever along the shift guide.

NOTE:

Make sure that the drive select lever is completely shifted into position.



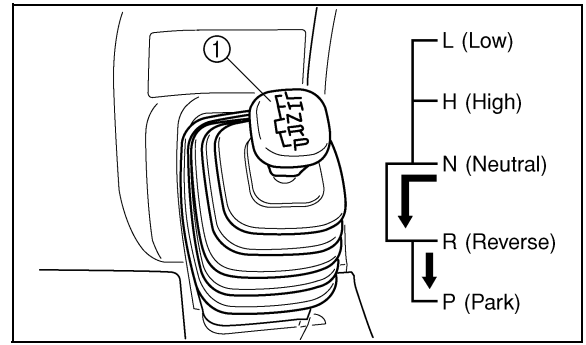
1. Drive select lever

3. Open the throttle lever gradually.

Shifting: Neutral to Reverse and Reverse to Park

NOTE:
The drive select lever cannot be shifted into or from reverse or park without applying the rear brake.

1. Bring the ATV to a complete stop and return the throttle lever to the closed position.
2. Apply the brake pedal.
3. Shift from neutral to reverse or from reverse to park and vice versa by moving the drive select lever along the shift guide.



1. Drive select lever

NOTE:
- When in reverse, the reverse indicator light should be on. If the light does not come on, ask a Yamaha dealer to inspect the electrical circuit.
- Due to the synchronizing mechanism in the engine, the light may not come on until the ATV starts moving.

4. Check behind for people or obstacles, and then release the brake pedal.

5. Open the throttle lever gradually and continue to watch to the rear while backing.

⚠ WARNING

POTENTIAL HAZARD

Improperly operating in reverse.

WHAT CAN HAPPEN

You could hit an obstacle or person behind you, resulting in serious injury.

HOW TO AVOID THE HAZARD

When you shift into reverse, make sure there are no obstacles or people behind you. When it is safe to proceed, go slowly.

EBU02101

Engine break-in

There is never a more important period in the life of your machine than the period between zero and 20 hours.

For this reason, we ask that you carefully read the following material. Because the engine is brand new, you must not put an excessive load on it for the first several hours of running. During the first 20 hours, the various parts in the engine wear and polish themselves to the correct operating clearances.

During this period, prolonged full throttle operation or any condition which might result in excessive engine heating must be avoided. However, momentary (2–3 seconds maximum) full throttle operation under load does not harm the engine.

Each full throttle acceleration sequence should be followed with a substantial rest period for the engine by cruising at lower r/min so the engine can rid itself of the temporary build up of heat. If any abnormality is noticed during this period, consult a Yamaha dealer.

0–10 hours:

Avoid continuous operation above half throttle. Allow a cooling off period of five to ten minutes after every hour of operation. Vary the speed of the machine from time to time. Do not operate it at one set throttle position.

10–20 hours:
Avoid prolonged operation above 3/4 throttle. Rev the machine freely but do not use full throttle at any time.

After break-in:
Avoid prolonged full throttle operation. Vary speeds occasionally.

EBU00612
Parking
When parking, stop the engine and shift the drive select lever into the park position, then turn the fuel cock to the “OFF” position.

EBU06151

Parking on a slope

⚠ WARNING

POTENTIAL HAZARD

Parking on a hill or other incline.

WHAT CAN HAPPEN

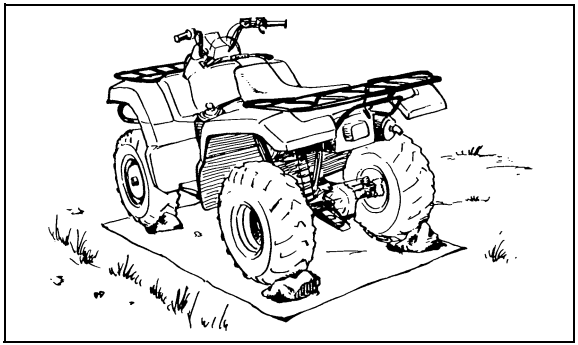
The ATV could roll out of control, increasing the chance of an accident.

HOW TO AVOID THE HAZARD

Avoid parking on hills or other inclines. If you must park on an incline, place the machine transversely across the incline, apply the parking brake, and block the front and rear wheels with rocks or other objects.

Do not park the ATV at all on hills that are so steep you could not walk up them easily.

1. Bring the machine to a stop by applying the brakes.
2. Stop the engine.
3. With the brake pedal applied, shift the drive select lever to the park position “P”.



EBU00221

Accessories and loading

EBU00222

Accessories

Accessories can affect the handling and control of your ATV. Keep the following in mind when considering an accessory or operating an ATV which has accessories.

- Choose only accessories designed for your ATV. Your Yamaha dealer has a variety of genuine Yamaha accessories. Other accessories may also be available on the market. However, it is not possible for Yamaha to test all non-Yamaha accessories, nor have any control over the quality or suitability of them. Choose a genuine Yamaha accessory, or one that is equivalent in design and quality.
- Accessories should be rigidly and securely mounted. An accessory which can shift position or come off while you are riding could affect your ability to control the ATV.
- Do not mount an accessory where it could interfere with your ability to control the ATV. Examples include (but are not limited to) a heavy or bulky object attached to the handlebars which could make steering difficult, an accessory that limits your ability to move around on the seat, or one that limits your view.
- Use extra caution when riding an ATV with accessories. The ATV may handle differently than it does without accessories.

EBU09601

Loading

Cargo or a trailer can change the stability and handling of an ATV. You must use common sense and good judgment when carrying cargo or towing a trailer. Keep the following points in mind:

- Never exceed the weight limits shown. An overloaded ATV can be unstable.

MAXIMUM LOADING LIMIT

- Vehicle loading limit (total weight of cargo, rider and accessories, and tongue weight): 220 kg (485 lb)
- Front carrier: 45 kg (99 lb)
- Rear carrier: 85 kg (187 lb)
- Storage box: 2.0 kg (4.4 lb)
- Trailer hitch:
  Pulling load (total weight of trailer and cargo): 550 kgf (1,212 lbf)
  Tongue weight (vertical weight on trailer hitch point): 15 kgf (33 lbf)

- Do not exceed the maximum tongue weight. You can measure tongue weight with a bathroom scale. Put the tongue of the loaded trailer on the scale with the tongue at hitch height. Adjust the load in the trailer, if necessary, to reduce the weight on hitch.
  If you are carrying cargo and towing a trailer, include the tongue weight in the maximum vehicle load limit.
- Load cargo on the carrier as close to the center of the vehicle as possible. Put cargo at the rear of the front carrier and at the front of the rear carrier. Center the load from side to side.
- Tie down cargo securely to the carriers. Make sure cargo in the trailer cannot move around. A shifting load can cause an accident.
- Make sure the load does not interfere with controls or your ability to see where you are going.

- Ride more slowly than you would without a load. The more weight you carry, the slower you should go. Although conditions vary, it is good practice not to exceed low range whenever you are carrying heavier loads or when towing a trailer.
- Allow more braking distance. A heavier vehicle takes longer to stop.
- Avoid making sharp turns unless at very slow speeds.
- Avoid hills and rough terrain. Choose terrain carefully. Added weight affects the stability and handling of the ATV.

⚠ WARNING

POTENTIAL HAZARD

Overloading this ATV or carrying or towing cargo improperly.

WHAT CAN HAPPEN

Could cause changes in vehicle handling which could lead to an accident.

HOW TO AVOID THE HAZARD

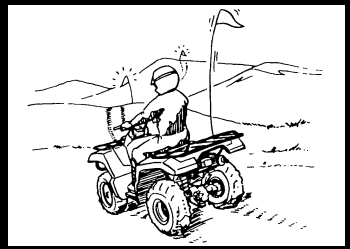
Never exceed the stated load capacity for this ATV.

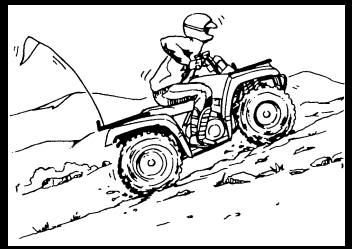
Cargo should be properly distributed and securely attached. Reduce speed when carrying cargo or pulling a trailer. Allow greater distance for braking.

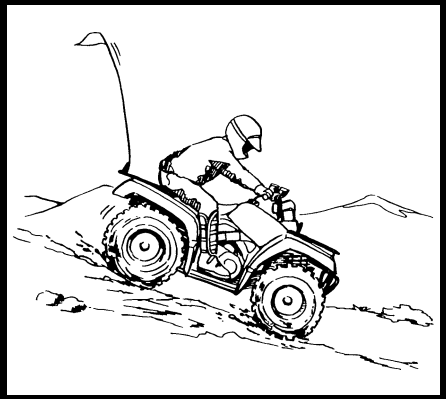
EBU15121

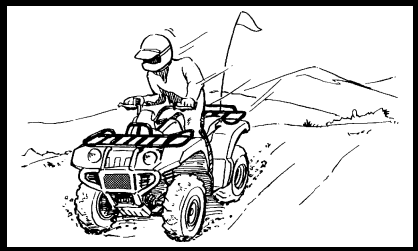
⚠ WARNING

Indicates a potential hazard that could result in serious injury or death.

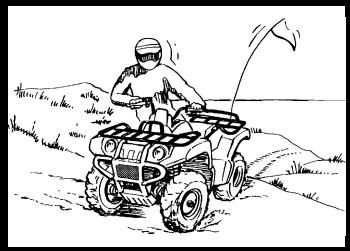


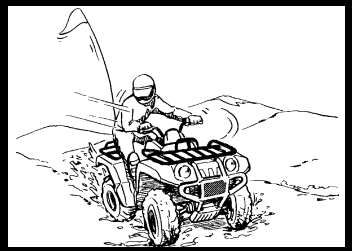


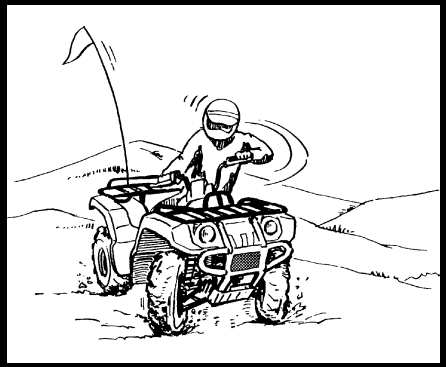




Riding Your ATV







⚠ WARNING

Indicates a potential hazard that could result in serious injury or death.

GETTING TO KNOW YOUR ATV

This ATV is mainly for utility use, but may also be used for recreation. This section, Riding your ATV, provides general ATV riding instructions for recreational riding. The skills and techniques described in this section, however, are appropriate for all types of riding. Riding your ATV requires special skills acquired through practice over a period of time. Take the time to learn the basic techniques well before attempting more difficult maneuvers.

Riding your new ATV can be a very enjoyable activity, providing you with hours of pleasure. But it is essential to familiarize yourself with the operation of the ATV to achieve the skill necessary to enjoy riding safely. Before you begin to ride, be sure you have read this Owner's Manual completely and understand the operation of the controls. Pay particular attention to the safety information on pages 2-1–2-6. Please also read all caution and warning labels on your ATV.

RIDE WITH CARE AND GOOD JUDGEMENT

Get training if you are inexperienced.
Beginners should get training from a certified instructor.
Become familiar with this ATV at slow speeds first, even if you are an experienced operator. Do not attempt to operate at maximum performance until you are totally familiar with the machine's handling and performance characteristics.

⚠ WARNING

POTENTIAL HAZARD
Operating this ATV without proper instruction.
WHAT CAN HAPPEN
The risk of an accident is greatly increased if the operator does not know how to operate the ATV properly in different situations and on different types of terrain.
HOW TO AVOID THE HAZARD
Beginning and inexperienced operators should complete the certified training course offered by Yamaha. They should then regularly practice the skills learned in the course and the operating techniques described in this Owner's Manual. For more information about the training course, contact an authorized ATV dealer or call 1-800-887-2887.

Riding your ATV requires skills acquired through practice over a period of time.
Take the time to learn the basic techniques well before attempting more difficult maneuvers.

Not recommended for children under 16 years of age.

⚠ WARNING

POTENTIAL HAZARD

Failure to follow the age recommendations for this ATV.

WHAT CAN HAPPEN

Use by children of ATVs that are not recommended for their age can lead to severe injury or death of the child.

HOW TO AVOID THE HAZARD

A child under 16 should never operate an ATV with engine size greater than 90cc.

This ATV is designed to carry operator and cargo only - passengers prohibited.

⚠ WARNING

POTENTIAL HAZARD

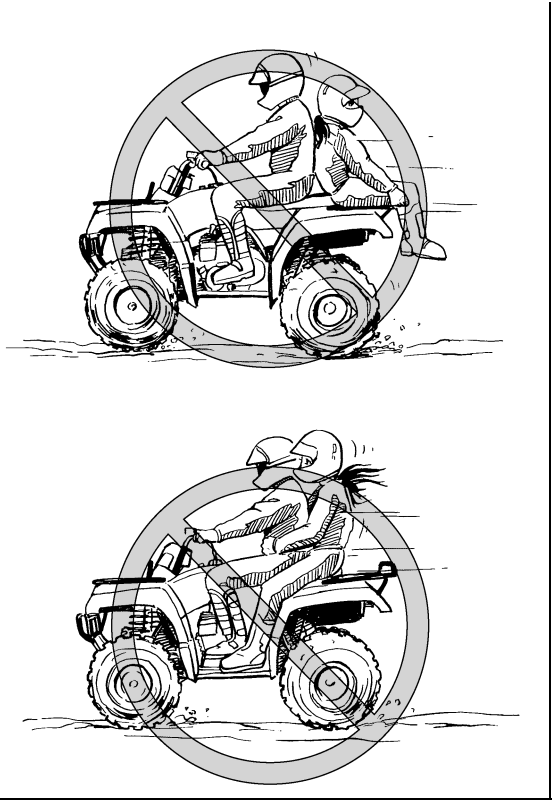
Carrying a passenger on this ATV.

WHAT CAN HAPPEN

Greatly reduces your ability to balance and control this ATV. Could cause an accident, resulting in harm to you and/or your passenger.

HOW TO AVOID THE HAZARD

Never carry a passenger. The long seat is to allow the operator to shift position as needed during operation. It is not for carrying passengers.



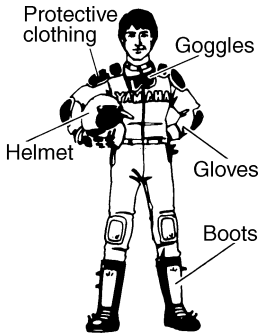
Apparel

⚠ WARNING

POTENTIAL HAZARD

Operating this ATV without wearing an approved motorcycle helmet, eye protection and protective clothing.

WHAT CAN HAPPEN



Operating without an approved motorcycle helmet increases your chances of a severe head injury or death in the event of an accident.

Operating without eye protection can result in an accident and increases your chances of a severe injury in the event of an accident.

Operating without protective clothing increases your chances of severe injury in the event of an accident.

HOW TO AVOID THE HAZARD

Always wear an approved motorcycle helmet that fits properly.

You should also wear:

- **eye protection (goggles or face shield)**
- **gloves**
- **boots**
- **long-sleeved shirt or jacket**
- **long pants**

Do not operate after consuming alcohol or drugs.

Operator's performance capability is reduced by the influence of alcohol or drugs.

⚠ WARNING

POTENTIAL HAZARD

Operating this ATV after consuming alcohol or drugs.

WHAT CAN HAPPEN

Could seriously affect your judgment.

Could cause you to react more slowly.

Could affect your balance and perception.

Could result in an accident.

HOW TO AVOID THE HAZARD

Never consume alcohol or drugs before or while driving this ATV.

Pre-operation checks

Always perform the pre-operation checks listed on page 5-1 before riding for safety and proper care of the ATV.

⚠ WARNING

POTENTIAL HAZARD

Failure to inspect the ATV before operating.

Failure to properly maintain the ATV.

WHAT CAN HAPPEN

Increases the possibility of an accident or equipment damage.

HOW TO AVOID THE HAZARD

Always inspect your ATV each time you use it to make sure the ATV is in safe operating condition. Always follow the inspection and maintenance procedures and schedules described in the Owner's Manual.

⚠ WARNING

POTENTIAL HAZARD

Operating this ATV with improper tires, or with improper or uneven tire pressure.

WHAT CAN HAPPEN

Use of improper tires on this ATV, or operation of this ATV with improper or uneven tire pressure, may cause loss of control, increasing your risk of an accident.

HOW TO AVOID THE HAZARD

Always use the size and type tires specified in the Owner's Manual for this vehicle on pages. Always maintain proper tire pressure as described in the Owner's Manual on page 5-13.

⚠ WARNING

Indicates a potential hazard that could result in serious injury or death.

Do not operate at speeds too fast for your skills or the conditions.

⚠ WARNING

POTENTIAL HAZARD

Operating this ATV at speeds too fast for your skills or the conditions.

WHAT CAN HAPPEN

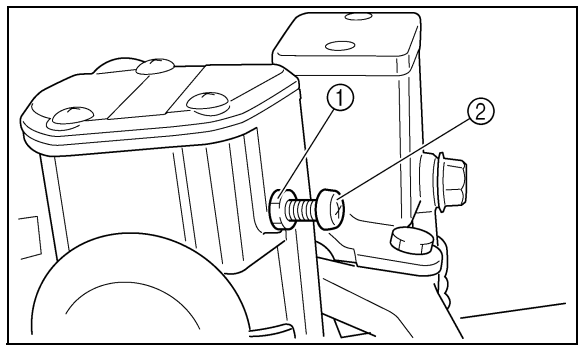
Increases your chances of losing control of the ATV, which can result in an accident.

HOW TO AVOID THE HAZARD

Always go at a speed that is proper for the terrain, visibility and operating conditions, and your experience.

Speed limiter

For riders less experienced with this model, this model is equipped with a speed limiter in the throttle lever housing. The speed limiter keeps the throttle from fully opening, even when the throttle lever is pushed to the maximum. Screwing in the adjuster limits the maximum engine power available and decreases the maximum speed of the ATV. Turning the screw in decreases top speed and turning it out increases top speed.



1. Locknut
2. Adjusting screw

Loading and accessories

Use extra caution when riding the ATV with additional loads, such as accessories or cargo. The ATV's handling may be adversely affected. Reduce your speed when adding additional loads.

MAXIMUM LOADING LIMIT

- Vehicle loading limit: 220 kg (485 lb)
  - * Total weight of cargo, rider and accessories, and trailer hitch vertical load.
- Front carrier: 45 kg (99 lb)
- Rear carrier: 85 kg (187 lb)
- Storage box: 2.0 kg (4.4 lb)
- Trailer hitch:
  Pulling load: 550 kgf (1,212 lbf)
  Total weight of trailer and cargo.
  Tongue weight: 15 kgf (33 lbf)
  Vertical weight on trailer hitch point.

⚠ WARNING

POTENTIAL HAZARD

Overloading this ATV or carrying or towing cargo improperly.

WHAT CAN HAPPEN

Could cause changes in vehicle handling which could lead to an accident.

HOW TO AVOID THE HAZARD

Never exceed the stated load capacity for this ATV.

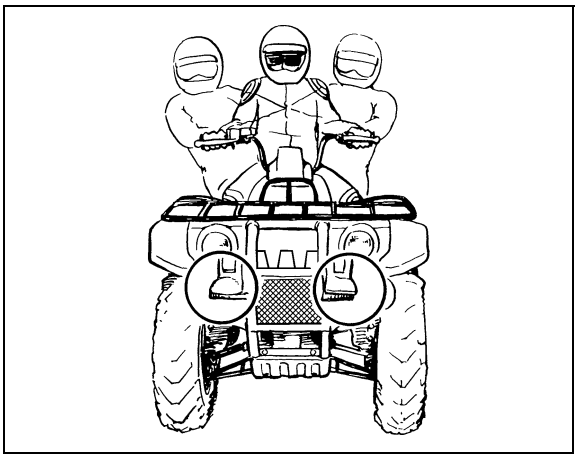
Cargo should be properly distributed and securely attached.

Reduce speed when carrying cargo or pulling a trailer. Allow greater distance for braking.

Always follow the instructions in your Owner's Manual for carrying cargo or pulling a trailer.

During operation

Always keep your feet on the footboards during operation. Otherwise your feet may contact the rear wheels.



⚠ WARNING

POTENTIAL HAZARD

Removing hands from handlebars or feet from footboards during operation.

WHAT CAN HAPPEN

Removing even one hand or foot can reduce your ability to control the ATV or could cause you to lose your balance and fall off of the ATV. If you remove a foot from a footboard, your foot or leg may come into contact with the rear wheels, which could injure you or cause an accident.

HOW TO AVOID THE HAZARD

Always keep both hands on the handlebars and both feet on the footboards of your ATV during operation.

Avoid wheelies and jumping. You may lose control of the ATV or overturn.

⚠ WARNING

POTENTIAL HAZARD

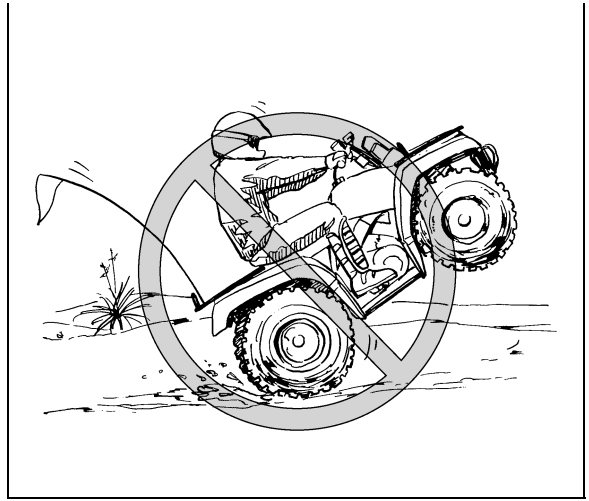
Attempting wheelies, jumps, and other stunts.

WHAT CAN HAPPEN

Increases the chance of an accident, including an overturn.

HOW TO AVOID THE HAZARD

Never attempt stunts, such as wheelies or jumps. Don't try to show off.



Modifications

⚠ WARNING

POTENTIAL HAZARD

Operating this ATV with improper modifications.

WHAT CAN HAPPEN

Improper installation of accessories or modification of this vehicle may cause changes in handling which in some situations could lead to an accident.

HOW TO AVOID THE HAZARD

Never modify this ATV through improper installation or use of accessories. All parts and accessories added to this vehicle should be genuine Yamaha or equivalent components designed for use on this ATV and should be installed and used according to instructions. If you have questions, consult an authorized ATV dealer.

Exhaust system

The exhaust system on the ATV is very hot during and following operation. To prevent burns, avoid touching the exhaust system. Park the ATV in a place where pedestrians or children are not likely to touch it.

⚠ WARNING

POTENTIAL HAZARD

Hot exhaust system.

WHAT CAN HAPPEN

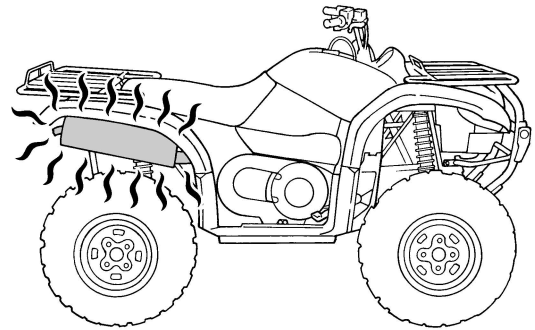
Dry grass or brush or other combustible material accumulated around the engine area could catch fire.

Someone touching the exhaust system during or after operation could be burned.

HOW TO AVOID THE HAZARD

Do not operate, idle, or park the ATV in dry grass or other dry ground cover. Keep the engine area free of dry grass, brush, or other combustible material.

Do not touch the hot exhaust system. Do not park the ATV in a place where others might be likely to touch it.



BE CAREFUL WHERE YOU RIDE

This ATV is designed for off-road use only. Riding on paved surfaces can cause loss of control.

⚠ WARNING

POTENTIAL HAZARD

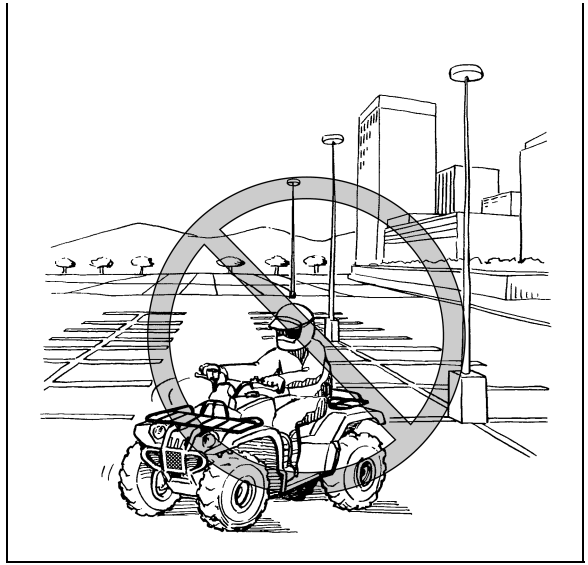
Operating this ATV on paved surfaces.

WHAT CAN HAPPEN

ATVs are designed for off-road use only. Paved surfaces may seriously affect handling and control of the ATV, and may cause the vehicle to go out of control.

HOW TO AVOID THE HAZARD

Always avoid paved surfaces, including sidewalks, driveways, parking lots and streets.



Do not ride on any public road, street, or highway.

Riding on public roads can result in collisions with other vehicles.

⚠ WARNING

POTENTIAL HAZARD

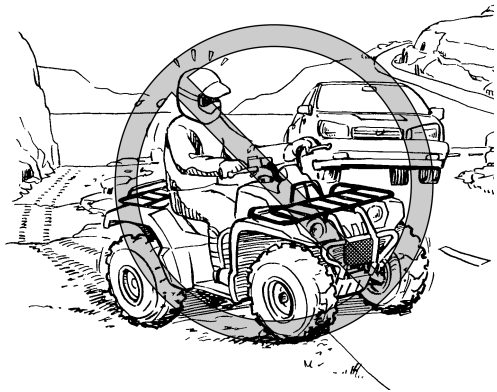
Operating this ATV on public streets, roads or highways.

WHAT CAN HAPPEN

You can collide with another vehicle.

HOW TO AVOID THE HAZARD

Never operate this ATV on any public street, road or highway, even a dirt or gravel one. In many states it is illegal to operate ATVs on public streets, roads and highways.



Know the terrain where you ride. Ride cautiously in unfamiliar areas. Stay alert for **holes, rocks, or roots** in the terrain, and **other hidden hazards** which may cause the ATV to upset.

⚠ WARNING

POTENTIAL HAZARD

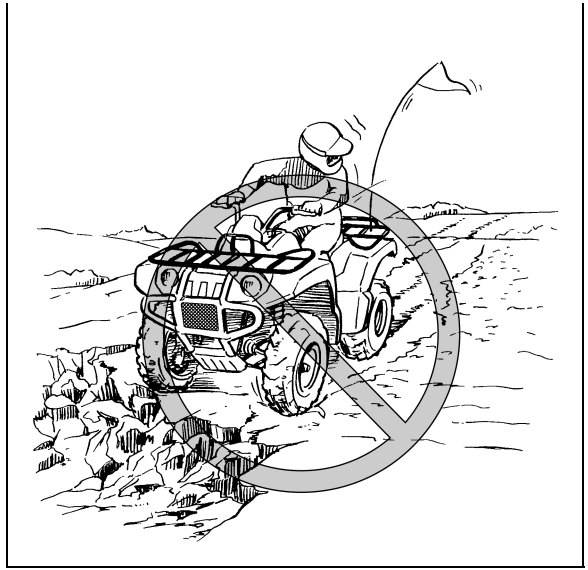
Failure to use extra care when operating this ATV on unfamiliar terrain.

WHAT CAN HAPPEN

You can come upon hidden rocks, bumps, or holes, without enough time to react. Could result in the ATV overturning or going out of control.

HOW TO AVOID THE HAZARD

Go slowly and be extra careful when operating on unfamiliar terrain. Always be alert to changing terrain conditions when operating the ATV.



⚠ WARNING

POTENTIAL HAZARD

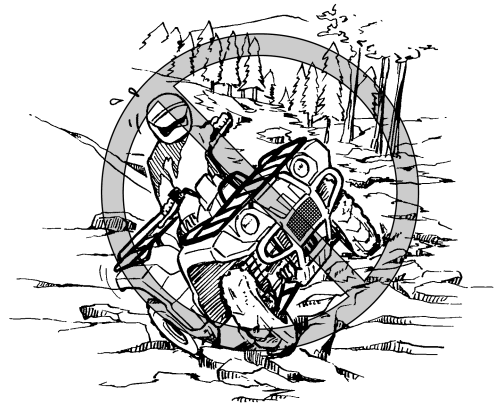
Failure to use extra care when operating on excessively rough, slippery or loose terrain.

WHAT CAN HAPPEN

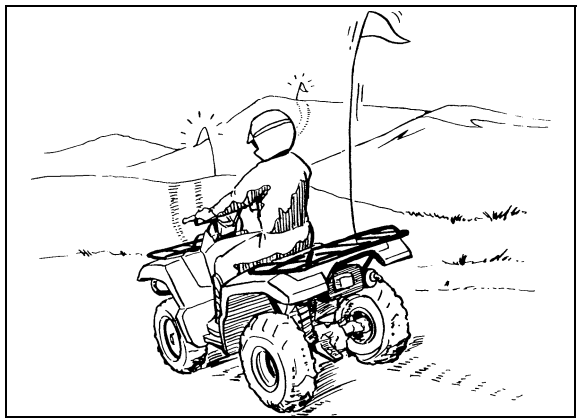
Could cause loss of traction or vehicle control, which could result in an accident, including an overturn.

HOW TO AVOID THE HAZARD

Do not operate on excessively rough, slippery or loose terrain until you have learned and practiced the skills necessary to control the ATV on such terrain. Always be especially cautious on these kinds of terrain.



When riding in an area where you might not easily be seen, such as desert terrain, mount a caution flag on the ATV. DO NOT use the flag pole bracket as a trailer hitch.



⚠ WARNING

POTENTIAL HAZARD

Operating in areas where you might not be seen by other off-road vehicles.

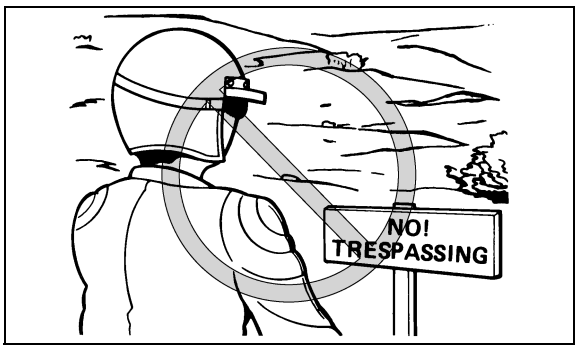
WHAT CAN HAPPEN

You could be in a collision. You could be injured.

HOW TO AVOID THE HAZARD

Always mount a caution flag on the ATV to make you more visible. Watch carefully for other vehicles.

Do not ride in areas posted “no trespassing”. Do not ride on private property without getting permission.



Select a large, flat area off-road to become familiar with your ATV. Make sure that this area is free of obstacles and other riders. You should practice control of the throttle, brakes, shifting procedures, and turning techniques in this area before trying more difficult terrain. Always avoid riding on paved surfaces: the ATV is designed for off-road use only, and handling maneuvers are more difficult to perform on pavement.

Shift to the parking position “P” and follow the instruction on page 6-1 to start the engine. Once it has warmed up you are ready to begin riding your ATV. Remember that the engine and exhaust pipe will be hot when riding and afterwards; do not allow skin or clothing to come in contact with these components.

With the engine idling, shift the drive select lever to the low position “L” or the high position “H”. Apply the throttle slowly and smoothly. The centrifugal clutch will engage and you will start to accelerate. If the throttle is applied too abruptly, the front wheels may lift off the ground resulting in a loss of directional control. Avoid higher speeds until you are thoroughly familiar with the operation of your ATV.

When slowing down or stopping, release the throttle and apply the brakes smoothly and evenly. Improper use of the brakes can cause the tires to lose traction, reducing control and increasing the possibility of an accident.

CAUTION:

Do not shift from drive position low “L” to high “H” or vice versa without coming to a complete stop. Damage to the engine or drive train may occur.

TURNING YOUR ATV

To achieve maximum traction while riding off-road in 2WD or 4WD, the two rear wheels are mounted solidly on one axle and turn together at the same speed. Furthermore, when riding in 4WD-LOCK ("DIFF. LOCK"), the front wheels also turn together at the same speed. Therefore, unless the wheel on the inside of the turn is allowed to slip or lose some traction, the ATV will resist turning. A special turning technique must be used to allow the ATV to make turns quickly and easily. It is essential that this skill be learned first at low speed.

⚠ WARNING

POTENTIAL HAZARD

Turning improperly.

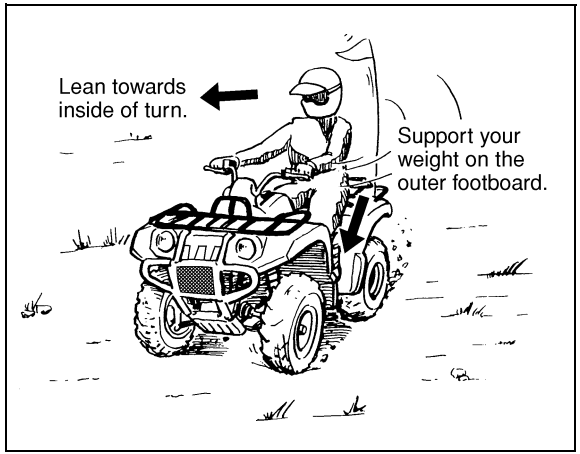
WHAT CAN HAPPEN

ATV could go out of control, causing a collision or overturn.

HOW TO AVOID THE HAZARD

Always follow proper procedures for turning as described in this Owner's Manual. Practice turning at low speeds before attempting to turn at faster speeds. Do not turn at speeds too fast for your skills or the conditions. Operate at a slow speed and allow extra time and distance for maneuvers when in 4WD-LOCK ("DIFF. LOCK").

As you approach a curve, slow down and begin to turn the handlebars in the desired direction. As you do so, put your weight on the footboard to the outside of the turn (opposite your desired direction) and lean your upper body into the turn. Use the throttle to maintain an even speed through the turn. This maneuver will let the wheel on the inside of the turn slip slightly, allowing the ATV to make the turn properly.



This procedure should be practiced at slow speed many times in a large off-road area with no obstacles. If an incorrect technique is used, your ATV may continue to go straight. If the ATV doesn't turn, come to a stop and then practice the procedure again. If the riding surface is slippery or loose, it may help to position more of your weight over the front wheels by moving forward on the seat.

Once you have learned this technique you should be able to perform it at higher speeds or in tighter curves.

Improper riding procedures such as abrupt throttle changes, excessive braking, incorrect body movements, or too much speed for the sharpness of the turn may cause the ATV to tip. If the ATV begins to tip over to the outside while negotiating a turn, lean more to the inside. It may also be necessary to gradually let off on the throttle and steer to the outside of the turn to avoid tipping over.

Remember: Avoid higher speeds until you are thoroughly familiar with the operation of your ATV.

CLIMBING UPHILL

Use proper riding techniques to avoid vehicle overturns on hills. Be sure that you can maneuver your ATV well on flat ground before attempting any incline and then practice riding first on gentle slopes. Try more difficult climbs only after you have developed your skill. In all cases avoid inclines with slippery or loose surfaces, or obstacles that might cause you to lose control.

⚠ WARNING

POTENTIAL HAZARD

Operating on excessively steep hills.

WHAT CAN HAPPEN

The vehicle can overturn more easily on extremely steep hills than on level surfaces or small hills.

HOW TO AVOID THE HAZARD

Never operate the ATV on hills too steep for the ATV or for your abilities. Practice on smaller hills before attempting large hills.

It is important when climbing a hill to make sure that your weight is transferred forward on the ATV. This can be accomplished by leaning forward and, on steeper inclines, standing on the footboards and leaning forward over the handlebars.

⚠ WARNING

POTENTIAL HAZARD

Climbing hills improperly.

WHAT CAN HAPPEN

Could cause loss of control or cause the ATV to overturn.

HOW TO AVOID THE HAZARD

Always follow proper procedures for climbing hills as described in this Owner's Manual.

Always check the terrain carefully before you start up any hill.

Never climb hills with excessively slippery or loose surfaces.

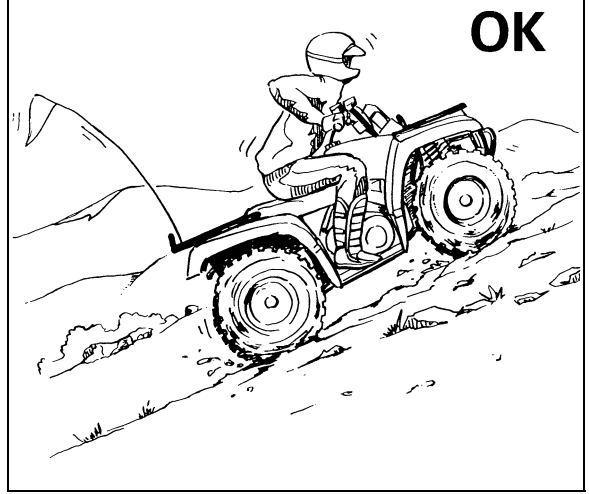
Shift your weight forward.

Never open the throttle suddenly.

The ATV could flip over backwards.

Never go over the top of any hill at high speed.

An obstacle, a sharp drop, or another vehicle or person could be on the other side of the hill.



If you are climbing a hill and you find that you have not properly judged your ability to make it to the top, you should turn the ATV around while you still have forward motion (provided you have the room to do so) and go down the hill.

⚠ WARNING

POTENTIAL HAZARD

Improperly crossing hills or turning on hills.

WHAT CAN HAPPEN

Could cause loss of control or cause the ATV to overturn.

HOW TO AVOID THE HAZARD

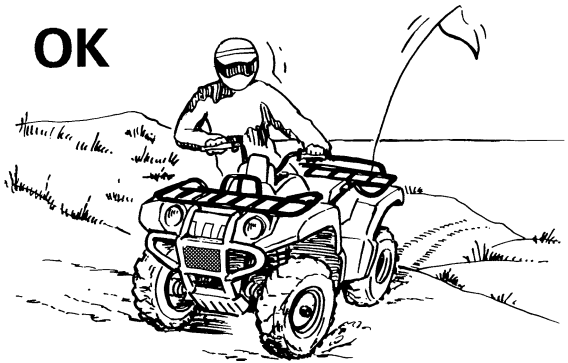
Never attempt to turn the ATV around on any hill until you have mastered the turning technique as described in the Owner's Manual on level ground. Be very careful when turning on any hill. Avoid crossing the side of a steep hill if possible.

When crossing the side of a hill:

Always follow proper procedures as described in the Owner's Manual.

Avoid hills with excessively slippery or loose surfaces.

Shift your weight to the uphill side of the ATV.



If your ATV has stalled or stopped and you believe you can continue up the hill, restart carefully to make sure you do not lift the front wheels which could cause you to lose control. If you are unable to continue up the hill, dismount the ATV on the uphill side. Physically turn the ATV around and then descend the hill.

If you start to roll backwards, DO NOT apply either brake abruptly. If you are in 2WD, apply only the front brake. When this ATV is in 4WD or 4WD-LOCK, all wheels (front and rear) are interconnected by the drive train. This means that applying either the front brake or the rear brake will brake all wheels. When descending hills, using either brake lever or the brake pedal will brake the wheels on the downhill side. Avoid sudden application of either the front or rear brake because the wheels on the uphill side could come off the ground. The ATV could easily tip over backwards. Apply both the front and rear brakes gradually, or dismount the ATV immediately on the uphill side.

⚠ WARNING

POTENTIAL HAZARD

Stalling, rolling backwards or improperly dismounting while climbing a hill.

WHAT CAN HAPPEN

Could result in ATV overturning.

HOW TO AVOID THE HAZARD

Use proper gear and maintain steady speed when climbing a hill.

If you lose all forward speed:

- **Keep weight uphill.**
- **Apply the brakes.**
- **Shift to the parking position "P" after you are stopped.**

If you begin rolling backwards:

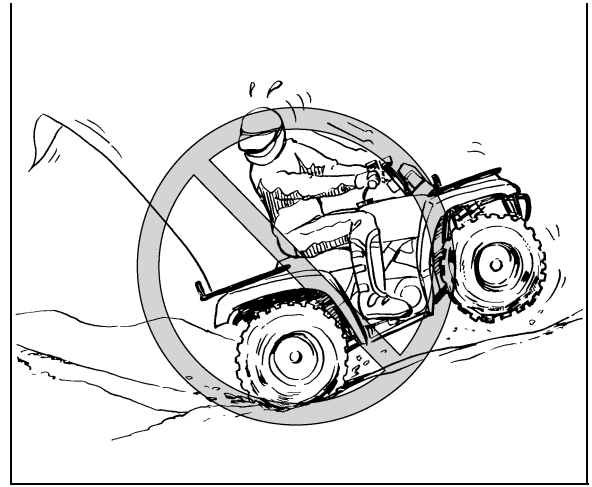
Keep weight uphill.

2WD: Never apply the rear brake while rolling backwards. Apply the front brake.

4WD or 4WD-LOCK: Apply both front and rear brakes gradually.

When fully stopped, shift to the parking position "P".

Dismount on uphill side or to a side if pointed straight uphill. Turn the ATV around and remount, following the procedure described in the Owner's Manual.



RIDING DOWNHILL

When riding your ATV downhill, shift your weight as far to the rear and uphill side of the ATV as possible. Move back on the seat and sit with your arms straight. Engine compression will do most of the braking for you. For maximum engine compression braking effect, select low range “L” and change to 4WD or 4WD-LOCK before beginning to descend the hill. Improper braking may cause a loss of traction. Use caution while descending a hill with loose or slippery surfaces. Braking ability and traction may be adversely affected by these surfaces. Improper braking may also cause a loss of traction.

When this ATV is in 4WD or 4WD-LOCK, all wheels (front and rear) are interconnected by the drive train. This means that applying either the front brake or the rear brake will brake all wheels. When descending hills, using either brake lever or the brake pedal will brake the wheels on the downhill side. Avoid sudden application of either the front or rear brake because the wheels on the uphill side could come off the ground. Apply both the front and rear brakes gradually.

Whenever possible, ride your ATV straight downhill. Avoid sharp angles which could allow the ATV to tip or roll over. Carefully choose your path and ride no faster than you will be able to react to obstacles which may appear.

⚠ WARNING

POTENTIAL HAZARD

Going down a hill improperly.

WHAT CAN HAPPEN

Could cause loss of control or cause the ATV to overturn.

Always follow proper procedures for going down hills as described in this Owner's Manual. Note: a special technique is required when braking as you go down a hill.

HOW TO AVOID THE HAZARD

Always check the terrain carefully before you start down any hill.

Shift your weight backward.

Never go down a hill at high speed.

Avoid going down a hill at an angle that would cause the vehicle to lean sharply to one side. Go straight down the hill where possible.

CROSSING A SLOPE

Traversing a sloping surface on your ATV requires you to properly position your weight to maintain proper balance. Be sure that you have learned the basic riding skills on flat ground before attempting to cross a sloping surface. Avoid slopes with slippery surfaces or rough terrain that may upset your balance.

As you travel across a slope, lean your body in the uphill direction. It may be necessary to correct the steering when riding on loose surfaces by pointing the front wheels slightly uphill. When riding on slopes be sure not to make sharp turns either up or down hill.

If your ATV does begin to tip over, gradually steer in the downhill direction if there are no obstacles in your path. As you regain proper balance, gradually steer again in the direction you wish to travel.

⚠ WARNING

POTENTIAL HAZARD

Improperly crossing hills or turning on hills.

WHAT CAN HAPPEN

Could cause loss of control or cause the ATV to overturn.

HOW TO AVOID THE HAZARD

Never attempt to turn the ATV around on any hill until you have mastered the turning technique as described in the Owner's Manual on level ground. Be very careful when turning on any hill. Avoid crossing the side of a steep hill if possible.

When crossing the side of a hill:

Always follow proper procedures as described in the Owner's Manual.

Avoid hills with excessively slippery or loose surfaces. Shift your weight to the uphill side of the ATV.

OK

CROSSING THROUGH SHALLOW WATER

The ATV can be used to cross slow moving, shallow water of up to a maximum of 35 cm (14 inches) in depth. Before entering the water, choose your path carefully. Enter where there is no sharp drop off, and avoid rocks or other obstacles which may be slippery or upset the ATV. Drive slowly and carefully.

⚠ WARNING

POTENTIAL HAZARD

Operating this ATV through deep or fast flowing water.

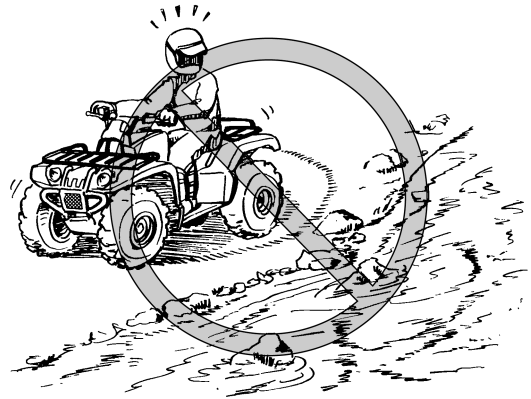
WHAT CAN HAPPEN

Tires may float, causing loss of traction and loss of control, which could lead to an accident.

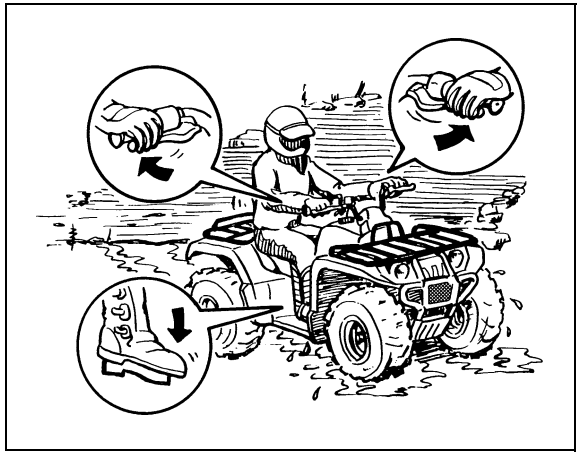
HOW TO AVOID THE HAZARD

Never operate this ATV in fast flowing water or in water deeper than that specified in your Owner's Manual.

Remember that wet brakes may have reduced stopping ability. Test your brakes after leaving water. If necessary, apply them several times to let friction dry out the linings.

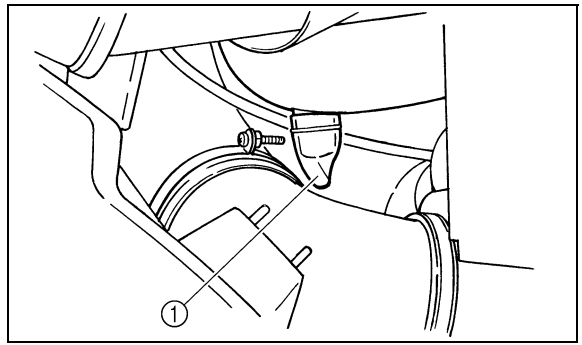


Test your brakes after leaving the water. Do not continue to ride your ATV without verifying that you have regained proper braking ability.

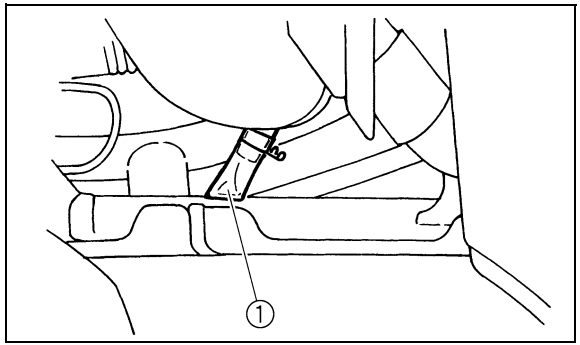


CAUTION:

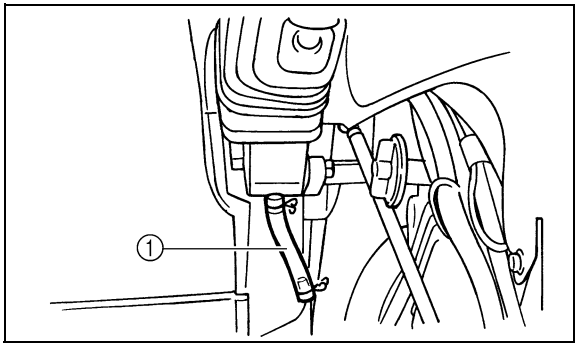
After riding your ATV in water, be sure to drain the trapped water by removing the check hose at the bottom of the air filter case, the V-belt cooling duct check hose and the drive select lever box check hose. Also, remove the V-belt case drain plug to drain any water that may have accumulated. Wash the ATV in fresh water if it has been operated in salt water or muddy conditions.



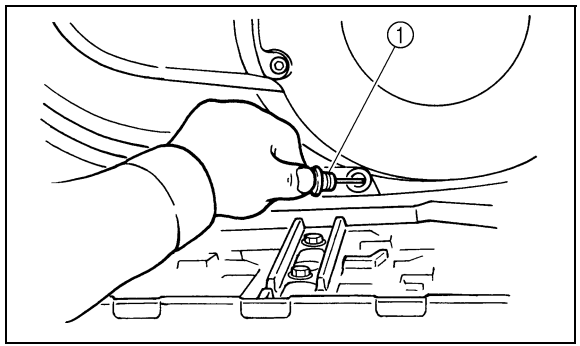
1. Air filter case check hose



1. V-belt cooling duct check hose (Left side)



1. Drive select lever box check hose



1. V-belt case drain plug

RIDING OVER ROUGH TERRAIN

Riding over rough terrain should be done with caution. Look out for obstacles which could cause damage to the ATV or could lead to an upset or accident. Be sure to keep your feet firmly mounted on the footboards at all times. Avoid jumping the ATV as loss of control and damage to the ATV may result.

⚠ WARNING

POTENTIAL HAZARD

Improperly operating over obstacles.

WHAT CAN HAPPEN

Could cause loss of control or a collision. Could cause the ATV to overturn.

HOW TO AVOID THE HAZARD

Before operating in a new area, check for obstacles.

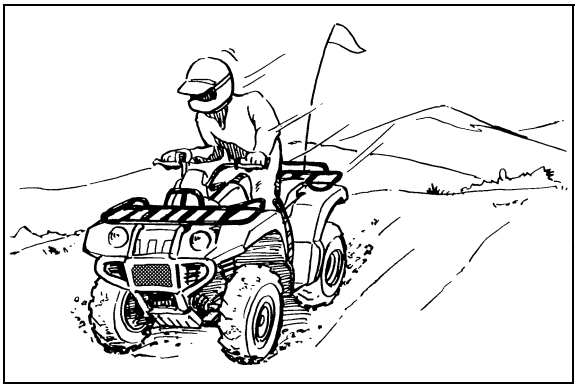
Never attempt to ride over large obstacles, such as large rocks or fallen trees.

When you go over obstacles, always follow proper procedures as described in the Owner's Manual.

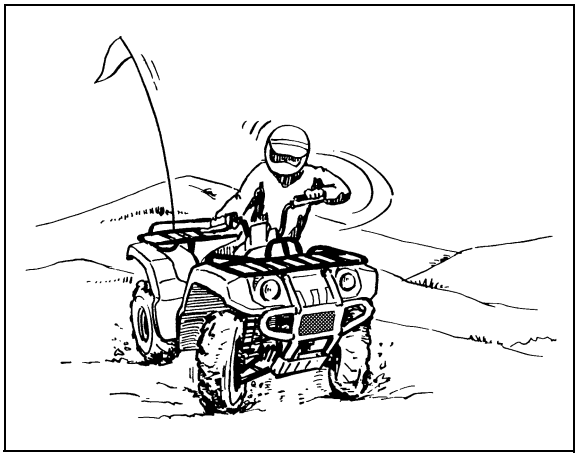
SLIDING AND SKIDDING

Care should be used when riding on loose or slippery surfaces since the ATV may slide. If unexpected and uncorrected, sliding could lead to an accident.

To reduce the tendency for the front wheels to slide in loose or slippery conditions, positioning your weight over the front wheels will sometimes help.



If the rear wheels of your ATV start to slide sideways, control can usually be regained (if there is room to do so) by steering in the direction of the slide. Applying the brakes or accelerating is not recommended until you have corrected the slide.



With practice, over a period of time, skill at controlled sliding can be developed. The terrain should be chosen carefully before attempting such maneuvers, since both stability and control are reduced. Bear in mind that sliding maneuvers should always be avoided on extremely slippery surfaces such as ice, since all control may be lost.

⚠ WARNING

POTENTIAL HAZARD

Skidding or sliding improperly.

WHAT CAN HAPPEN

You may lose control of this ATV. You may also regain traction unexpectedly, which may cause the ATV to overturn.

HOW TO AVOID THE HAZARD

Learn to safely control skidding or sliding by practicing at low speeds and on level, smooth terrain.

On extremely slippery surfaces, such as ice, go slowly and be very cautious in order to reduce the chance of skidding or sliding out of control.

WHAT TO DO IF ...

This section is designed to be a reference guide only. Be sure to read each section on riding techniques completely.

WHAT TO DO ...

- If your ATV doesn't turn when you want it to:
  Bring the ATV to a stop and practice the turning maneuvers again. Be sure you are putting your weight on the footboard to the outside of the turn. Position your weight over the front wheels for better control. (See pages 7-22–7-23.)
- If your ATV begins to tip while turning:
  Lean more into the turn to regain balance. If necessary, gradually let off the throttle and/or steer to the outside of the turn. (See pages 7-22–7-23.)
- If your ATV starts to slide sideways:
  Steer in the direction of the slide if you have the room. Applying the brakes or accelerating is not recommended until you have corrected the slide. (See pages 7-38–7-39.)
- If your ATV can't make it up a hill you are trying to climb:
  Turn the ATV around if you still have forward speed. If not, stop, dismount on the uphill side of the ATV and physically turn the ATV around. If the ATV starts to slip backwards DO NOT USE THE REAR BRAKE - the ATV may tip over on top of you. Dismount the ATV on the uphill side. (See pages 7-24–7-29.)

- If your ATV is traversing a sloping surface: Be sure to ride with your weight positioned towards the uphill side of the ATV to maintain proper balance. If the ATV starts to tip, steer down the hill (if there are no obstacles in your way) to regain balance. If you discover that the ATV is going to tip over, dismount on the uphill side. (See pages 7-32–7-33.)
- If your ATV encounters shallow water: Ride slowly and carefully through slow moving water, watching for obstacles. Be sure to let water drain from the ATV and CHECK YOUR BRAKES FOR PROPER OPERATION when you come out of the water. Do not continue to ride your ATV until you have regained adequate braking ability. (See pages 7-34–7-36.)

⚠ WARNING

Indicates a potential hazard that could result in serious injury or death.

EBU00515

PERIODIC MAINTENANCE AND ADJUSTMENT

Periodic inspection, adjustment and lubrication will keep your machine in the safest and most efficient condition possible. Safety is an obligation of the machine owner. The most important points of machine inspection, adjustment and lubrication are explained on the following pages.

⚠ WARNING

POTENTIAL HAZARD

Servicing an engine while it is running.

WHAT CAN HAPPEN

Moving parts can catch clothing or parts of the body, causing injury.

Electrical components can cause shocks or can start fires.

HOW TO AVOID THE HAZARD

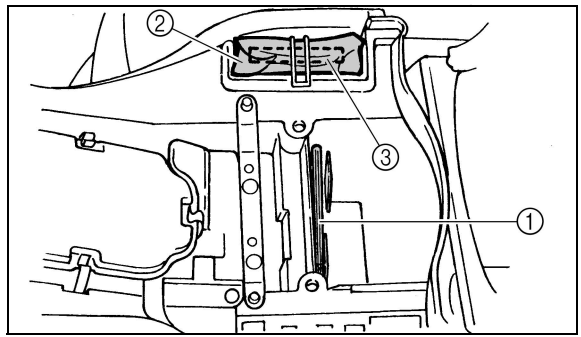
Turn off the engine when performing maintenance unless otherwise specified.

Have a Yamaha dealer perform service if you are not familiar with machine service.

EBU00562

Owner's manual and tool kit

You are recommended to put this owner's manual in the vinyl bag and always carry it in the storage box. Put the owner's tool kit and low-pressure tire gauge in the space beside the battery.



1. Owner's manual
2. Owner's tool kit
3. Low-pressure tire gauge

The service information included in this manual is intended to provide you, the owner, with the necessary information for completing your own preventive maintenance and minor repairs. The tools provided in the Owner's tool kit are sufficient for this purpose, except that a torque wrench is also necessary to properly tighten nuts and bolts.

NOTE:
If you do not have a torque wrench available during a service operation requiring one, take your machine to a Yamaha dealer to check the torque settings and adjust them as necessary.

⚠ WARNING

POTENTIAL HAZARD

Operating this ATV with improper modifications.

WHAT CAN HAPPEN

Improper installation of accessories or modification of this vehicle may cause changes in handling which in some situations could lead to an accident.

HOW TO AVOID THE HAZARD

Never modify this ATV through improper installation or use of accessories. All parts and accessories added to this vehicle should be genuine Yamaha or equivalent components designed for use on this ATV and should be installed and used according to instructions. If you have questions, consult an authorized Yamaha ATV dealer.

EBU02611

PERIODIC MAINTENANCE/LUBRICATION

NOTE:

- For ATVs not equipped with an odometer or an hour meter, follow the month maintenance intervals.
- For ATVs equipped with an odometer or an hour meter, follow the km (mi) or hours maintenance intervals. However, keep in mind that if the ATV isn't used for a long period of time, the month maintenance intervals should be followed.

ITEM	ROUTINE	Whichever comes first ⇨		INITIAL			EVERY	
			month	1	3	6	6	12
			km (mi)	320 (200)	1,200 (750)	2,400 (1,500)	2,400 (1,500)	4,800 (3,000)
			hours	20	75	150	150	300
Valves*	• Check valve clearance. • Adjust if necessary.			○		○	○	○
Cooling system	• Check coolant leakage. • Repair if necessary. • Replace coolant every 24 months.			○	○	○	○	○
Spark plug	• Check condition. • Adjust gap and clean. • Replace if necessary.			○	○	○	○	○
Air filter element	• Clean. • Replace if necessary.			Every 20–40 hours (More often in wet or dusty areas.)				
Carburetor*	• Check starter (choke). • Adjust engine idling speed.				○	○	○	○
Crankcase breather system*	• Check breather hose for cracks or damage. • Replace engine idling speed.					○	○	○
Exhaust system*	• Check for leakage. • Tighten if necessary. • Replace gasket(s) if necessary.					○	○	○
Sparks arrester	• Clean.					○	○	○

ITEM	ROUTINE	Whichever comes first ⇨		INITIAL			EVERY	
			month	1	3	6	6	12
			km (mi)	320 (200)	1,200 (750)	2,400 (1,500)	2,400 (1,500)	4,800 (3,000)
			hours	20	75	150	150	300
Fuel line*	• Check fuel hose for cracks or damage. • Replace if necessary.					○	○	○
Engine oil	• Replace (Warm engine before draining).			○		○	○	○
Engine oil filter cartridge	• Replace.			○		○		○
Final gear oil **Differential gear oil**	• Check oil level/oil leakage. • Replace.			○				○
Front brake*	• Check operation/fluid leakage/see NOTE page 8-5. • Correct if necessary.			○	○	○	○	○
Rear brake*	• Check operation/fluid leakage/see NOTE page 8-5. • Correct if necessary.			○	○	○	○	○
Select lever safety system cable*	• Check operation. • Adjust if necessary.					○	○	○
V-belt*	• Check operation. • Check for cracks or damage.			○			○	○
Wheels*	• Check balance/damage/runout. • Repair if necessary.			○		○	○	○
Wheel bearing*	• Check bearing assemblies for looseness/damage. • Replace if damaged.			○		○	○	○
Front and rear suspension*	• Check operation. • Correct if necessary.					○		○
Steering system*	• Check operation/Replace if damaged. • Check toe-in/Adjust if necessary.			○	○	○	○	○
Rear upper and lower knuckle pivots*	• Lubricate with lithium-soap-based grease.					○	○	○
Drive shaft universal joint*	• Lubricate with lithium-soap-based grease.					○	○	○
Engine mount*	• Check for cracks or damage.					○	○	○
Front and rear axle boots*	• Check operation. • Replace if damaged.			○				○
Stabilizer bushes*	• Check for cracks or damage.					○	○	○

ITEM	ROUTINE	Whichever comes first ⇨		INITIAL			EVERY	
			month	1	3	6	6	12
			km (mi)	320 (200)	1,200 (750)	2,400 (1,500)	2,400 (1,500)	4,800 (3,000)
			hours	20	75	150	150	300
Fittings and fasteners*	• Check all chassis fittings and fasteners. • Correct if necessary.			○	○	○	○	○
Lights and switches*	• Check operation. • Adjust headlight beam.			○	○	○	○	○

* Since these items require special tools, data and technical skills, have a Yamaha dealer perform the service.

NOTE:

- Recommended brake fluid: DOT 4
- Brake fluid replacement:
  - When disassembling the master cylinders or calipers, replace the brake fluid. Normally check the brake fluid level and add fluid as required.
  - On the inner parts of the master cylinders and calipers, replace the oil seals every two years.
  - Replace the brake hoses every four years, or if cracked or damaged.

⚠ WARNING

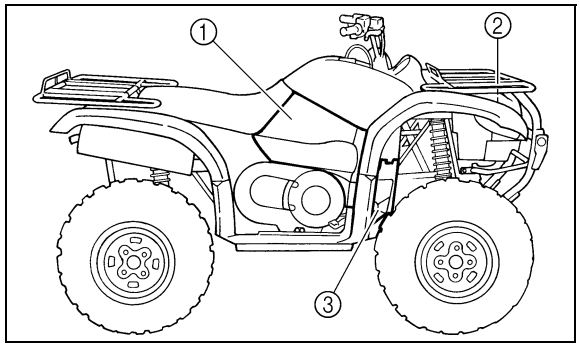
Indicates a potential hazard that could result in serious injury or death.

EBU00614

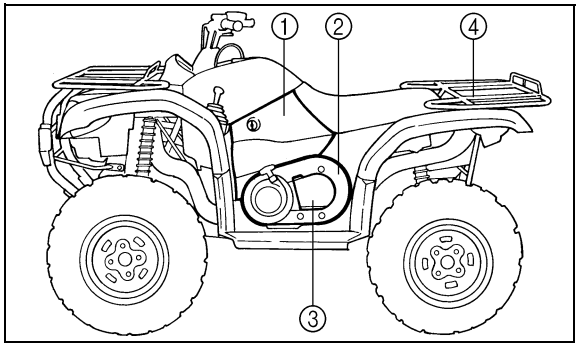
Panel removal and installation

The panels illustrated need to be removed to perform some of the maintenance described in this chapter.

Refer to this section each time a panel has to be removed or reinstalled.



1. Panel A
2. Panel C
3. Panel B



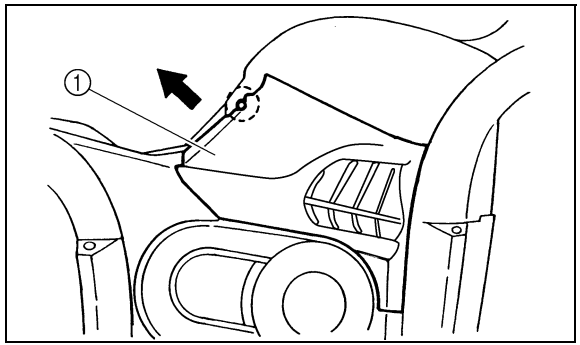
1. Panel D
2. Panel E
3. Panel F
4. Panel G

EBU00879

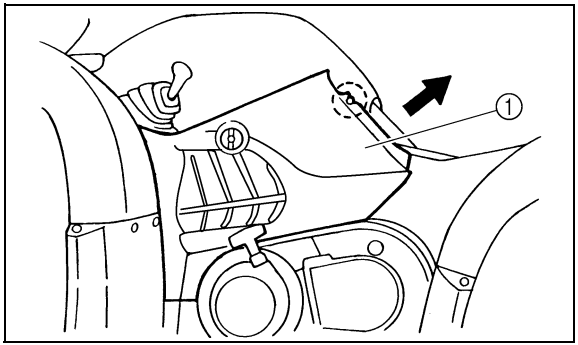
Panels A and D

To remove

1. Remove the seat. (See page 4-20 for seat removal and installation procedures.)
2. Pull outward on the area shown, and then pull upward as shown.



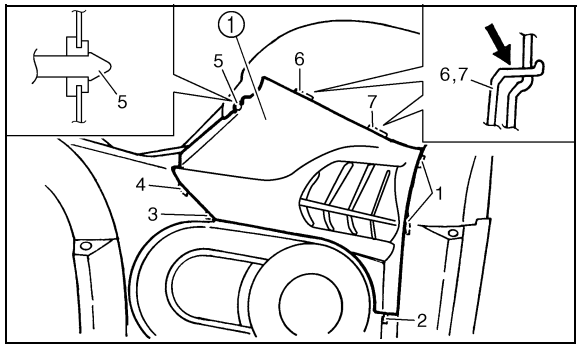
1. Panel A



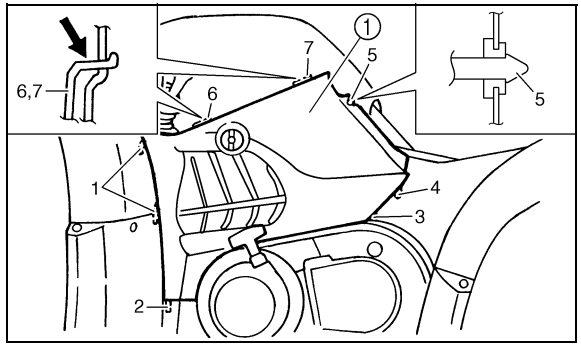
1. Panel D

To install

1. Insert the panel projections in the numerical order shown in the illustration, and then push inward on the area shown.
2. Install the seat.



1. Panel A



1. Panel D

EBU00962

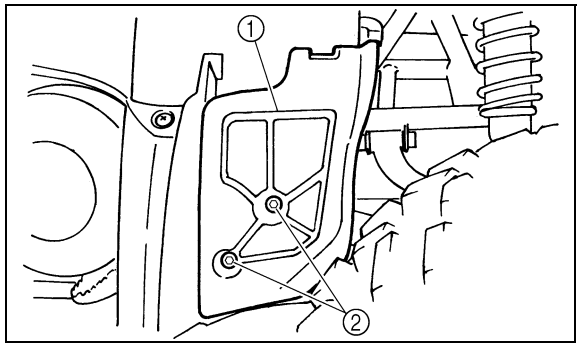
Panel B

To remove

Remove the bolts.

To install

Place the panel in the original position and install the bolts.



1. Panel B
2. Bolt (× 2)

CAUTION:

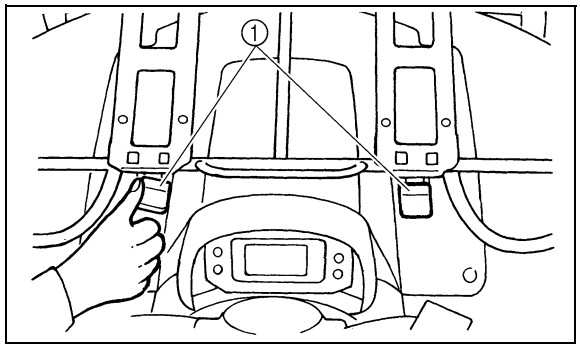
When installing the panel, be sure not to pinch the cables or wires.

EBU01141

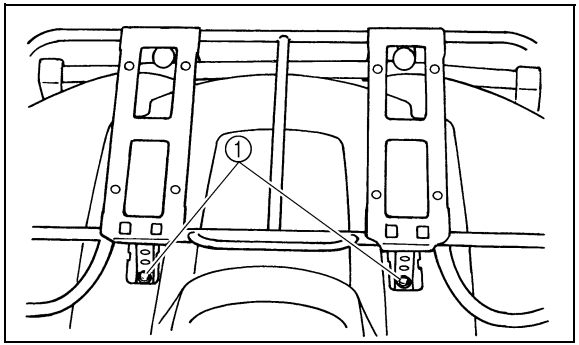
Panel C

To remove

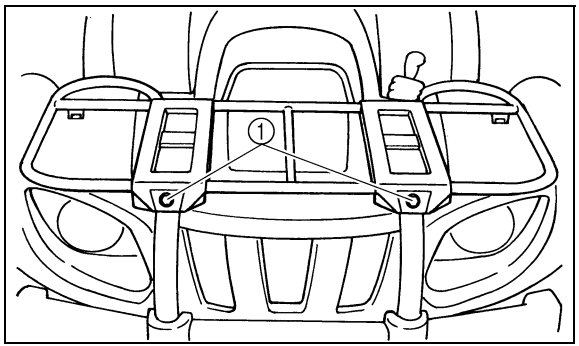
1. Remove the front carrier by removing the stay covers at the rear, then by removing the bolts.



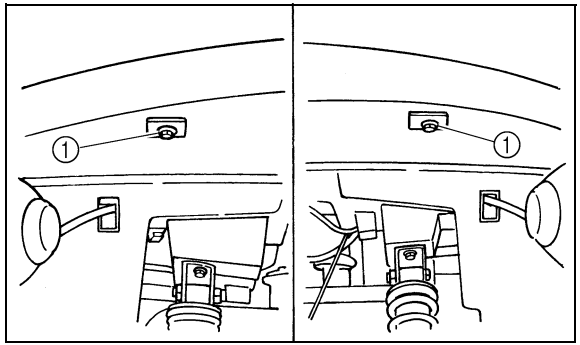
1. Front carrier stay cover (× 2)



1. Bolt (× 2) (top)

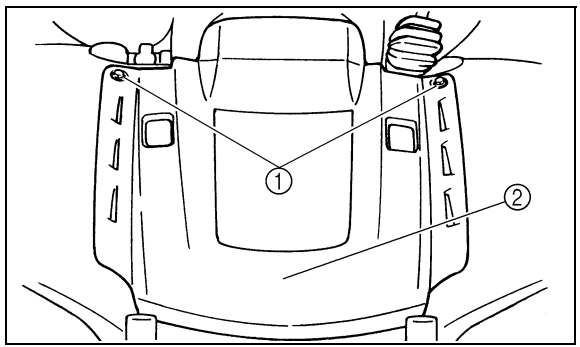


1. Bolt (× 2) (top)



1. Bolt (× 2) (Under fenders)

2. Remove the quick fasteners and pull the panel upward.



1. Quick fastener (× 2) 2. Panel C

To install

1. Place the panel in the original position and install the quick fasteners.
2. Install the front carrier by installing the bolts and tightening them to the specified torques.

Tightening torques:
Carrier bolt (top):
26 Nm (2.6 m·kgf, 19 ft·lbf)
Carrier bolt (under fenders):
7 Nm (0.7 m·kgf, 5.1 ft·lbf)

3. Install the stay covers.

EBU01013

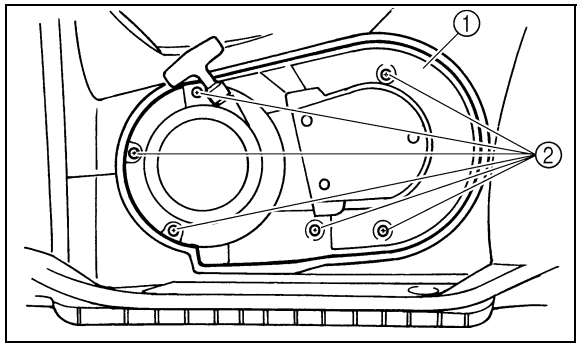
Panel E

To remove

Remove the bolts, and then take the panel off.

To install

Place the panel in the original position, and then install the bolts.



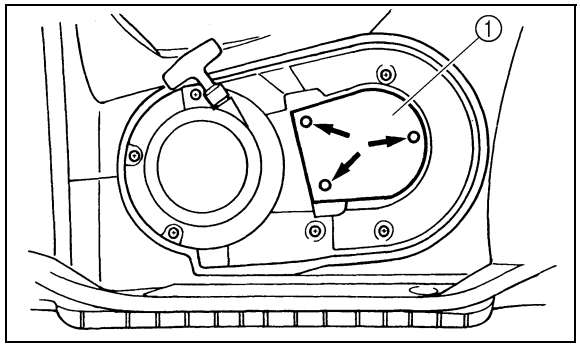
1. Panel E
2. Bolt (× 6)

EBU00638

Panel F

To remove

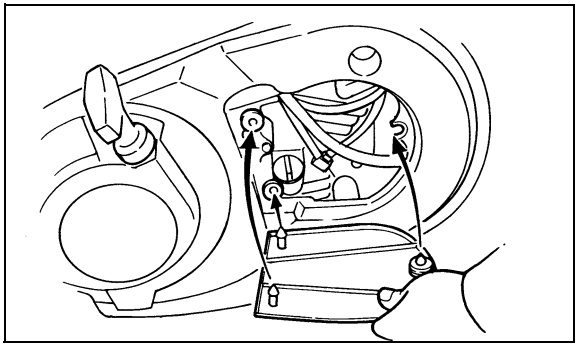
Pull outward on the areas shown.



1. Panel F

To install

Place the panel in its original position.

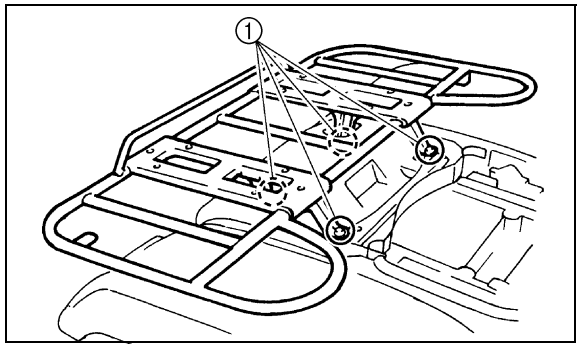


EBU15041

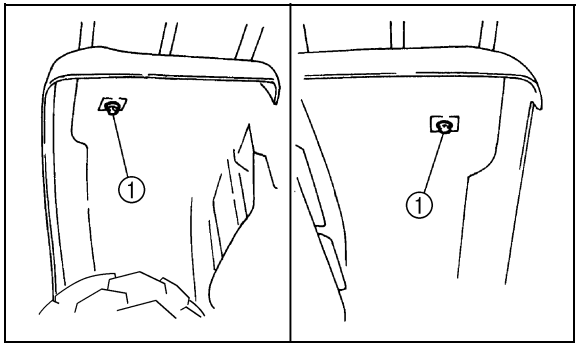
Panel G

To remove

1. Remove the seat. (See page 4-20 for seat removal and installation procedures.)
2. Remove the rear carrier by removing the bolts.

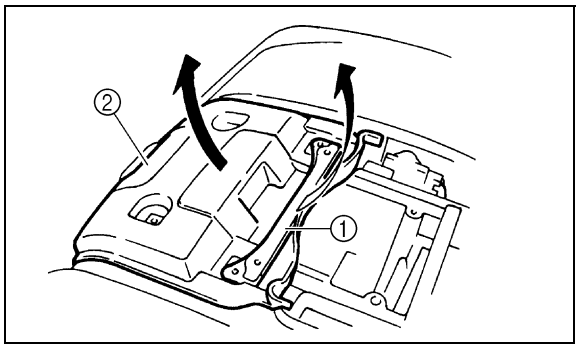


1. Bolt (× 4)



1. Bolt (× 2) (Under fenders)

3. Remove the seat under bracket and the panel by pulling them off.



1. Seat under bracket 2. Panel G

To install

1. Place the panel and the seat under bracket in the original position.
2. Install the rear carrier by installing the bolts and tightening them to the specified torques.

Tightening torques:
Carrier bolt (top):
26 Nm (2.6 m·kgf, 19 ft·lbf)
Carrier bolt (under fenders):
7 Nm (0.7 m·kgf, 5.1 ft·lbf)

3. Install the seat.

EBU10992

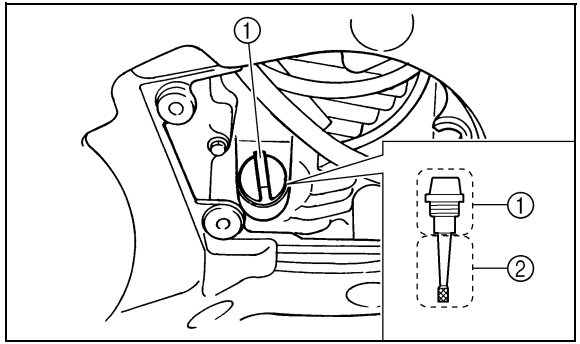
Engine oil and oil filter cartridge

The engine oil level should be checked before each ride. In addition, the oil must be changed and the oil filter cartridge replaced at the intervals specified in the periodic maintenance and lubrication chart.

To check the engine oil level

1. Remove panel F. (See page 8-13 for panel removal and installation procedures.)
2. Place the ATV on a level surface.
3. Start the engine, warm it up for several minutes, and then turn it off.
4. Wait a few minutes until the oil settles.

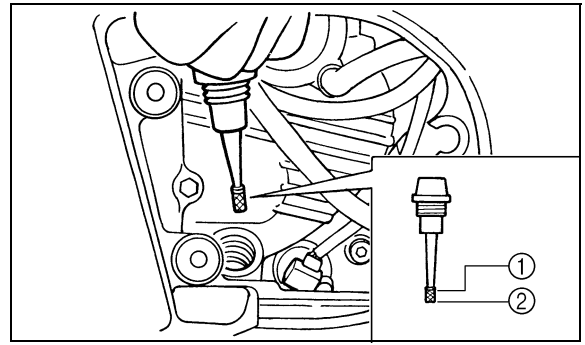
5. Remove the engine oil filler cap and wipe off the dipstick with a clean rag.



1. Engine oil filler cap 2. Dipstick

6. Insert the dipstick in the oil filler hole (without screwing it in), and then remove it again to check the oil level.

NOTE:
The engine oil should be between the minimum and maximum level marks.

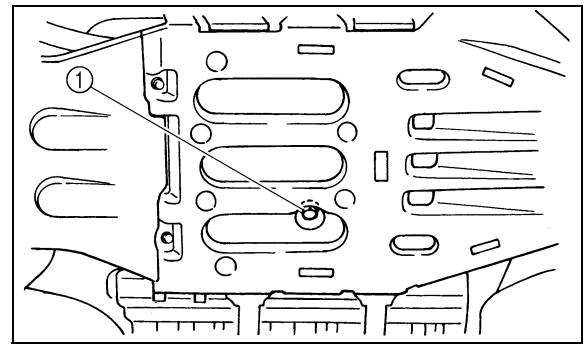


1. Maximum level mark 2. Minimum level mark

7. If the engine oil is at or below the minimum level mark, add sufficient oil of the recommended type to raise it to the correct level.
8. Insert the dipstick into the oil filler hole, and then tighten the oil filler cap.
9. Install the panel.

To change the engine oil (with or without oil filter cartridge replacement)

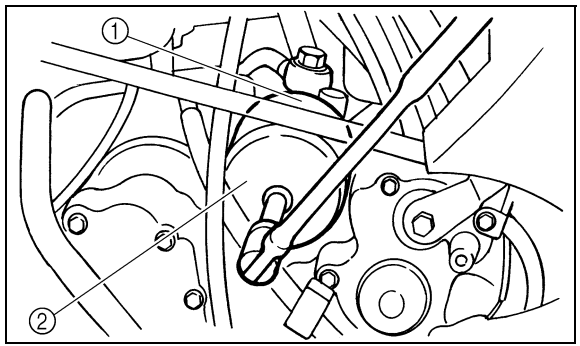
1. Remove panel F. (See page 8-13 for panel removal and installation procedures.)
2. Start the engine, warm it up for several minutes, and then turn it off.
3. Place an oil pan under the engine to collect the used oil, and then remove the engine oil filler cap.
4. Remove the engine oil drain bolt to drain the oil from the crankcase.



1. Engine oil drain bolt

NOTE:
Skip steps 5–9 if the oil filter cartridge is not being replaced.

5. Remove panels D and E. (See pages 8-7–8-8 and 8-12 for panel removal and installation procedures.)
6. Remove the oil filter cartridge with an oil filter wrench.

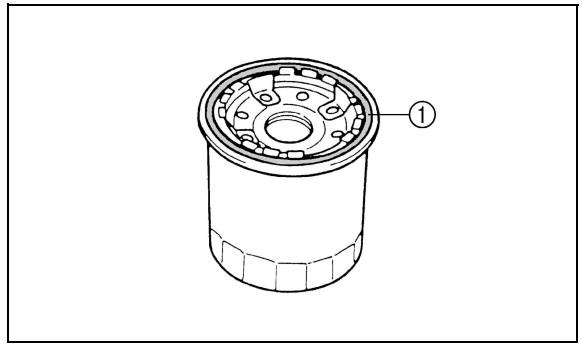


1. Engine oil filter cartridge 2. Oil filter wrench

NOTE:
An oil filter wrench is available at a nearby Yamaha dealer.

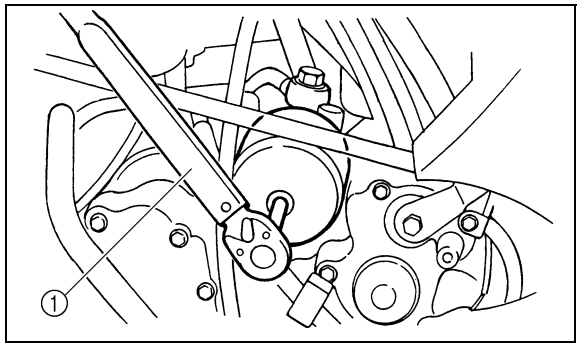
7. Apply a light coat of engine oil to the O-ring of the new oil filter cartridge.

NOTE:
Make sure the O-ring is seated properly.



1. O-ring

8. Install the new oil filter cartridge with an oil filter wrench, and then tighten it to the specified torque with a torque wrench.



1. Torque wrench

Tightening torque:
Oil filter cartridge:
17 Nm (1.7 m·kgf, 12 ft·lbf)

9. Install panels D and E.
10. Install the engine oil drain bolt, and then tighten it to the specified torque.

Tightening torque:
Engine oil drain bolt:
30 Nm (3.0 m·kgf, 22 ft·lbf)

11. Add the specified amount of recommended engine oil, and then install the engine oil filler cap and tighten it.

Recommended engine oil:
See page 10-2.
Oil quantity:
Without oil filter cartridge replacement:
1.9 L (1.67 Imp qt, 2.01 US qt)
With oil filter cartridge replacement:
2.0 L (1.76 Imp qt, 2.11 US qt)

CAUTION:

- **In order to prevent clutch slippage (since the engine oil also lubricates the clutch), do not mix any chemical additives. Do not use oils with a diesel specification of "CD" or oils of a higher quality than specified. In addition, do not use oils labeled "ENERGY CONSERVING II" or higher.**
- **Make sure that no foreign material enters the crankcase.**

12. Start the engine and warm it up for several minutes. While warming up, check for oil leakage. If oil leakage is found, turn the engine off immediately and check for the cause.
13. Turn the engine off, and then check the oil level and correct it if necessary.
14. Install panel F.

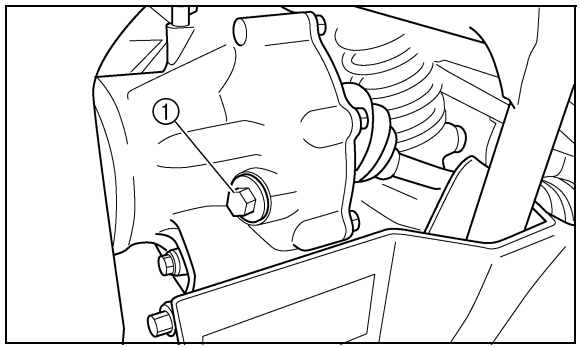
EBU08801

Final gear oil

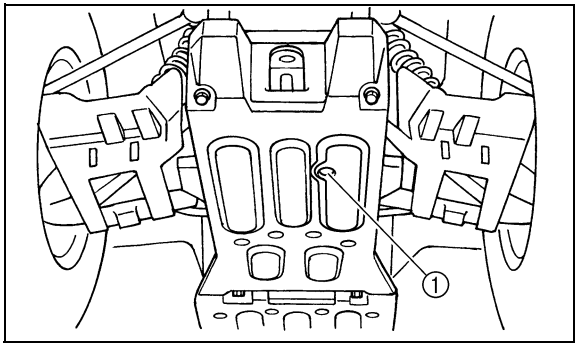
The final gear case must be checked for oil leakage before each ride. If any leakage is found, have a Yamaha dealer check and repair the ATV.

Replacing the final gear oil

1. Place the ATV on a level surface.
2. Place a container under the final gear case to collect the used oil.
3. Remove the oil filler bolt and the drain bolt to drain the oil.



1. Final gear oil filler bolt



1. Final gear oil drain bolt

4. Install the drain bolt and tighten it to the specified torque.

Tightening torque:
Final gear oil drain bolt:
23 Nm (2.3 m·kgf, 16 ft·lbf)

5. Fill the final gear case with the specified amount of the recommended oil.

Recommended oil:
SAE 80 API GL-4 Hypoid gear oil
Oil quantity:
0.25 L (0.22 Imp qt, 0.26 US qt)

CAUTION:

Be sure no foreign material enters the final gear case.

6. Install the filler bolt and tighten it to the specified torque.

Tightening torque:
Final gear oil filler bolt:
23 Nm (2.3 m·kgf, 16 ft·lbf)

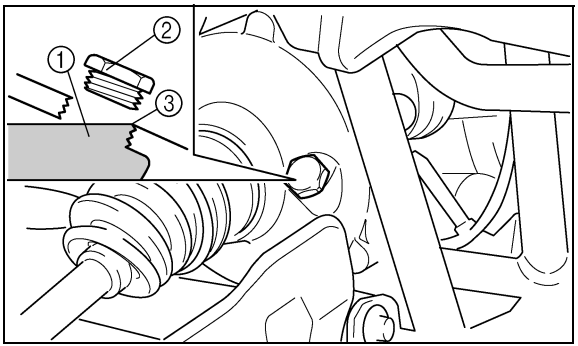
7. Check for oil leakage. If oil leakage is found, check for the cause.

EBU07062

Differential gear oil

Differential gear oil measurement

1. Place the ATV on a level surface.
2. Remove the differential gear oil filler bolt and check the oil level. It should be up to the brim of the filler hole. If the level is low, add sufficient oil of the recommended type to raise it to the specified level.



1. Differential gear oil
2. Differential gear oil filler bolt
3. Specified level

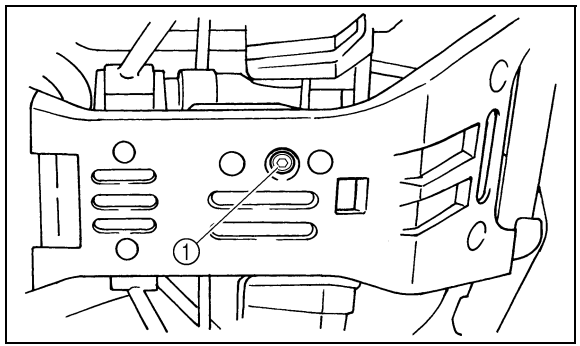
CAUTION:

Be sure no foreign material enters the differential gear case.

3. Install the differential gear oil filler bolt.

Differential gear oil replacement

1. Place the ATV on a level surface.
2. Place a container under the differential gear case to collect the used oil.
3. Remove the differential gear oil filler bolt and differential gear oil drain bolt to drain the oil.



1. Differential gear oil drain bolt

4. Install the differential gear oil drain bolt and tighten it to the specified torque.

Tightening torque:
Differential gear oil drain bolt:
10 Nm (1.0 m·kgf, 7.2 ft·lbf)

5. Fill the differential gear case with the recommended oil.

Recommended oil:
SAE 80 API GL-4 Hypoid gear oil
Oil quantity:
0.28 L (0.25 Imp qt, 0.3 US qt)

CAUTION:

Be sure no foreign material enters the differential gear case.

6. Install the differential gear oil filler bolt, and then tighten it to the specified torque.

Tightening torque:
Differential gear oil filler bolt:
23 Nm (2.3 m·kgf, 16 ft·lbf)

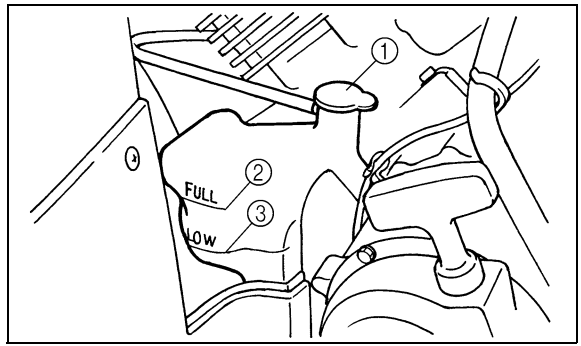
7. Check for oil leakage. If oil leakage is found, check for the cause.

EBU12560

Cooling system

1. Place the ATV on a level surface.
2. Check the coolant level in the coolant reservoir when the engine is cold as the coolant level will vary with engine temperature.

NOTE:
The coolant should be between the minimum and maximum level marks.



1. Coolant reservoir tank cap
2. Maximum level mark
3. Minimum level mark

3. If the coolant is at or below the minimum level mark, remove panel D (See pages 8-7–8-8 for panel removal and installation procedures.), remove the reservoir cap, add coolant to the maximum level mark, install the reservoir cap, and then install the panel.

Coolant reservoir capacity
(up to the maximum level mark):
0.3 L (0.26 Imp qt, 0.32 US qt)

CAUTION:

Hard water or salt water is harmful to the engine. You may use soft water if you cannot get distilled water.

NOTE:

- If water is added, have a Yamaha dealer check the antifreeze content of the coolant as soon as possible.
- The radiator fan operation is completely automatic. It is switched on or off according to the coolant temperature in the radiator.

If your ATV overheats, see page 8-64 for details.

EBU12572

Changing the coolant

⚠ WARNING

POTENTIAL HAZARD

Removing the radiator cap when the engine and radiator are still hot.

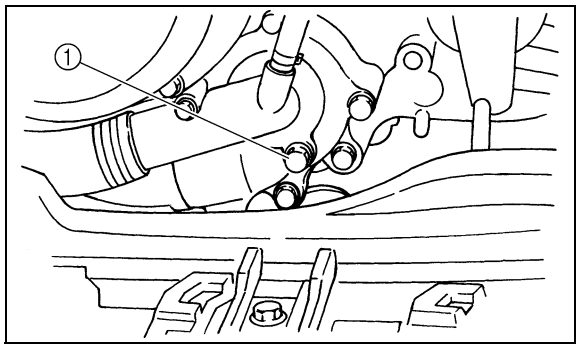
WHAT CAN HAPPEN

You could be burned by hot fluid and steam blown out under pressure.

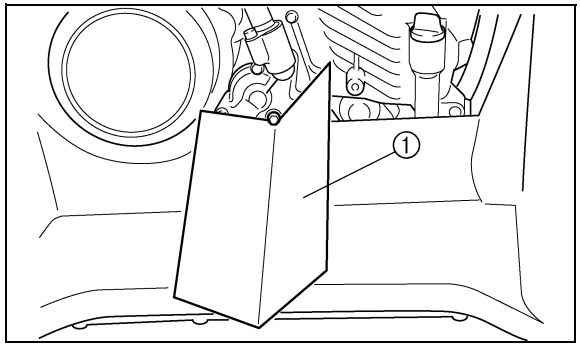
HOW TO AVOID THE HAZARD

Wait for the engine to cool before removing the radiator cap. Always use a thick rag over the cap. Allow any remaining pressure to escape before completely removing the cap.

1. Place the ATV on a level surface.
2. Remove panels E and F. (See pages 8-12–8-13 for panel removal and installation procedures.)
3. Place a container under the engine, and then remove the coolant drain bolt. (Use a trough or a similar object as shown to prevent coolant from spilling on the footrest.)

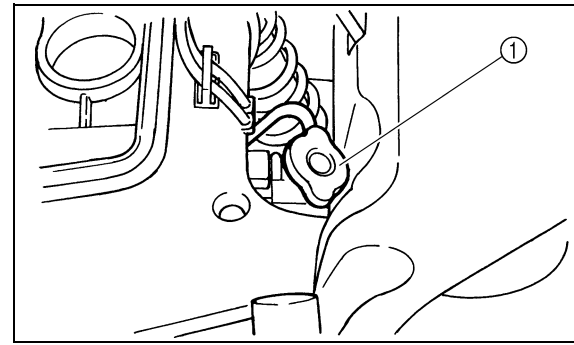


1. Coolant drain bolt



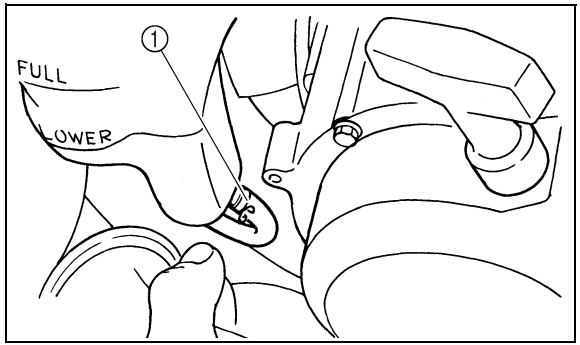
1. Trough

4. Remove the front carrier and panel C. (See pages 8-10 and 8-11 for removal and installation procedures.)



1. Radiator cap

5. Remove the radiator cap.
6. Remove panel D. (See pages 8-7–8-8 for panel removal and installation procedures.)
7. Remove the coolant reservoir cap.
8. Disconnect the hose on the coolant reservoir side, and then drain the coolant from the coolant reservoir.



1. Coolant reservoir drain hose

9. After draining the coolant, thoroughly flush the cooling system with clean tap water.
10. Replace the coolant drain bolt washer if it is damaged, install the coolant drain bolt, and then tighten it to the specified torque.

Tightening torque:
Coolant drain bolt:
10 Nm (1.0 m·kgf, 7 ft·lbf)

11. Install the coolant reservoir hose.
12. Pour the recommended coolant into the reservoir to the maximum level mark, and then install the reservoir cap and panel D.
13. Pour the recommended coolant into the radiator until it is full, and then install the radiator cap.

Recommended antifreeze:
High quality ethylene glycol antifreeze containing corrosion inhibitors for aluminum engines.
Antifreeze and water mixing ratio:
1:1
Total amount:
1.8 L (1.58 Imp qt, 1.90 US qt)
Coolant reservoir capacity
(up to the maximum level mark):
0.3 L (0.26 Imp qt, 0.32 US qt)

CAUTION:

Hard water or salt water is harmful to the engine. You may use soft water if you cannot get distilled water.

14. Start the engine and let it idle for several minutes. Stop the engine, and then check the coolant level in the radiator. If it is low, add more coolant until it reaches the top of the radiator.
15. Check for coolant leakage.

NOTE:

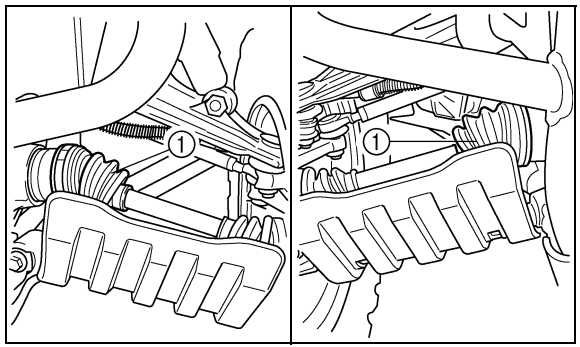
If any leakage is found, have a Yamaha dealer check the cooling system.

16. Install the panels and the front carrier.

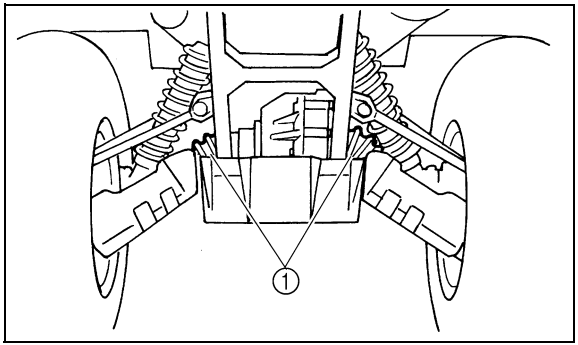
EBU00862

Axle boots

Check the protective boots for holes or tears. If any damage is found, have them replaced by a Yamaha dealer.



1. Front axle boot (× 2 each side)



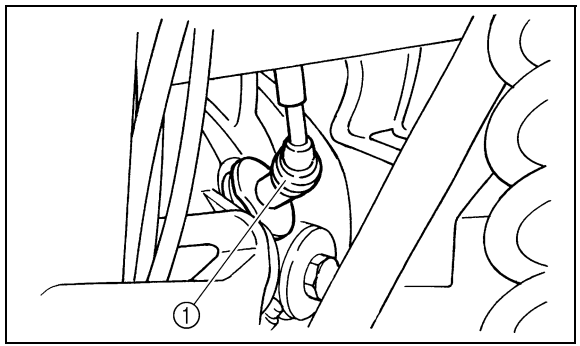
1. Rear axle boot (× 2 each side)

EBU00864

Spark plug inspection

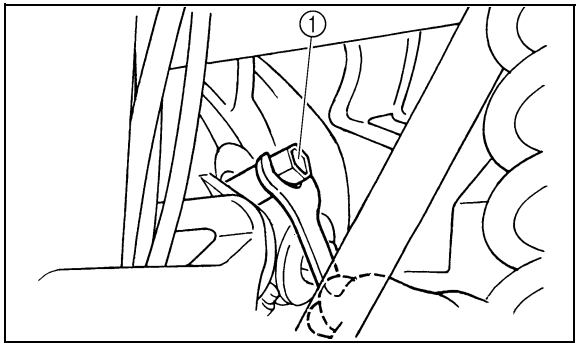
Removal

1. Remove panel A. (See pages 8-7–8-8 for panel removal and installation procedures.)
2. Remove the spark plug cap.



1. Spark plug cap

3. Use the spark plug wrench in the tool kit to remove the spark plug as shown.



1. Spark plug wrench

Inspection

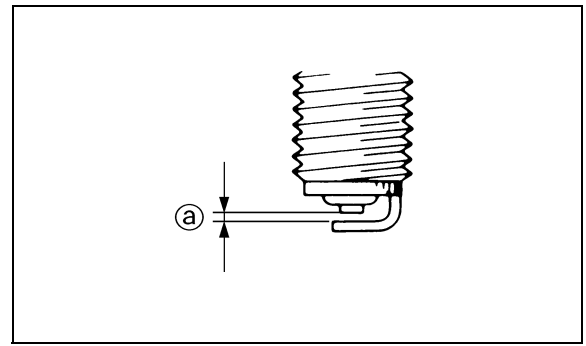
The spark plug is an important engine component and is easy to inspect. The condition of the spark plug can indicate the condition of the engine. The ideal color on the white insulator around the center electrode is a medium-to-light tan color for a ATV that is being ridden normally. Do not attempt to diagnose such problems yourself. Instead, take the ATV to a Yamaha dealer. You should periodically remove and inspect the spark plug because heat and deposits will cause the spark plug to slowly break down and erode. If electrode erosion becomes excessive, or if carbon and other deposits are excessive, you should replace the spark plug with the specified plug.

Specified spark plug:
DPR8EA-9 (NGK)

Installation

1. Measure the electrode gap with a wire thickness gauge and, if necessary, adjust the gap to specification.

Spark plug gap:
0.8–0.9 mm (0.031–0.035 in)



a. Spark plug gap

2. Clean the gasket surface. Wipe off any grime from the threads.
3. Install the spark plug and tighten it to the specified torque.

Tightening torque:
Spark plug:
17.5 Nm (1.75 m·kgf, 12.5 ft·lbf)

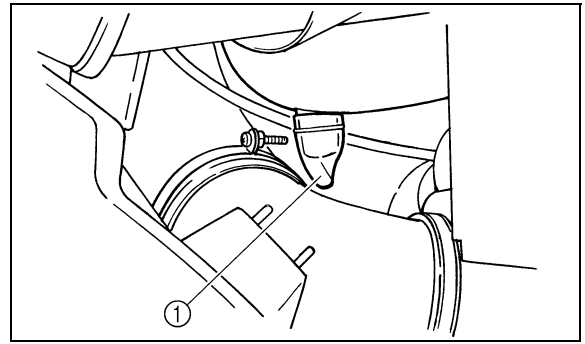
NOTE:
If a torque wrench is not available when you are installing a spark plug, a good estimate of the correct torque is 1/4 to 1/2 turn past finger tight. Have the spark plug tightened to the specified torque as soon as possible.

4. Install the spark plug cap.
5. Install the panel.

EBU12111

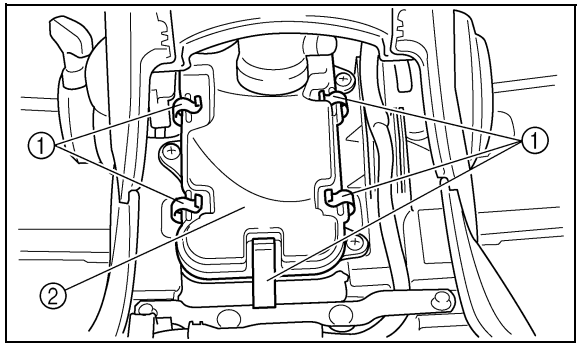
Air filter element cleaning

NOTE:
There is a check hose at the bottom of the air filter case. If dust or water collects in this hose, empty the hose and clean the air filter element and air filter case.

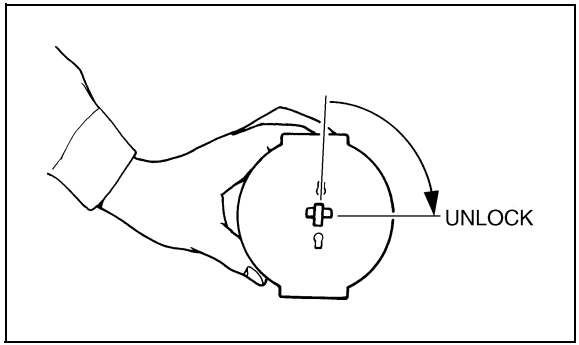


1. Air filter case check hose

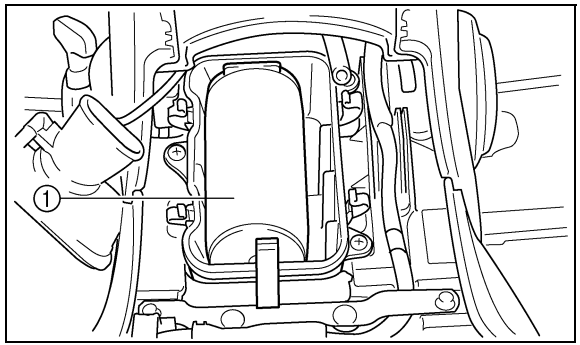
1. Remove the seat. (See page 4-20 for seat removal and installation procedures.)
2. Remove the air filter case cover by unhooking the holders.



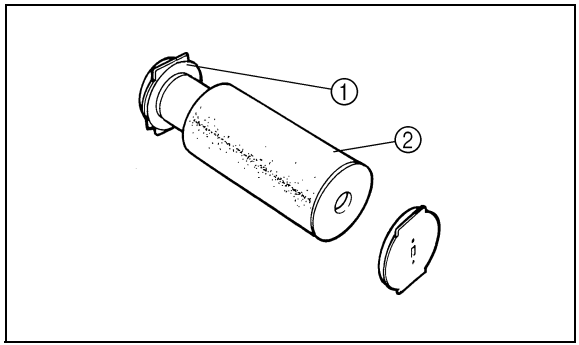
1. Holder (× 5)
2. Air filter case cover



3. Remove the air filter element.



1. Air filter element



1. Frame
2. Air filter element

4. Remove the air filter element from its frame.
5. Wash the air filter element gently but thoroughly in solvent.

⚠ WARNING

POTENTIAL HAZARD

Using low flash point solvents or gasoline to clean the air filter element.

WHAT CAN HAPPEN

Low flash point solvents or gasoline can catch fire or explode.

HOW TO AVOID THE HAZARD

Use parts cleaning solvent to clean the air filter element.

6. Squeeze the excess solvent out of the air filter element and let it dry.

CAUTION:

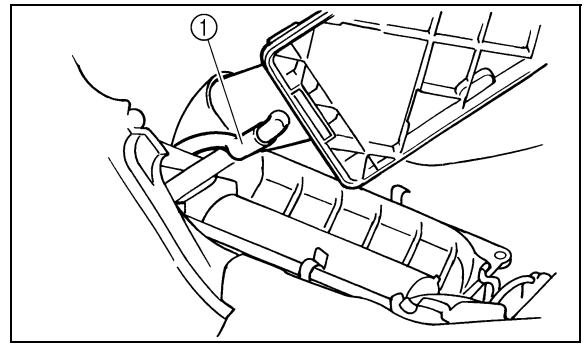
Do not twist the air filter element when squeezing it.

7. Inspect the air filter element and replace it if damaged.
8. Apply Yamaha foam air filter oil or other quality foam air filter oil to the air filter element.

NOTE:

The air filter element should be wet but not dripping.

9. Pull the air filter element over its frame.
10. Install the air filter element.



1. Breather hose

11. Install the air filter case cover and be sure to connect the hose.
12. Install the seat.

NOTE:

The air filter element should be cleaned every 20–40 hours. It should be cleaned and lubricated more often if the machine is operated in extremely dusty areas. Each time air filter element maintenance is performed, check the air inlet to the air filter case for obstructions. Check the air filter element rubber joint to the carburetor and manifold fittings for an airtight seal. Tighten all fittings securely to avoid the possibility of unfiltered air entering the engine.

CAUTION:

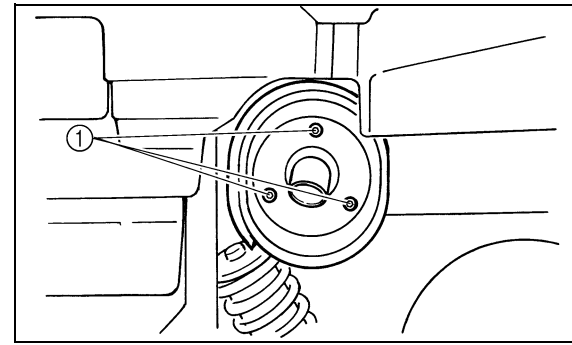
Never operate the engine with the air filter element removed. This will allow unfiltered air to enter, causing rapid engine wear and possible engine damage. Additionally, operation without the air filter element will affect carburetor jetting with subsequent poor performance and possible engine overheating.

EBU01066

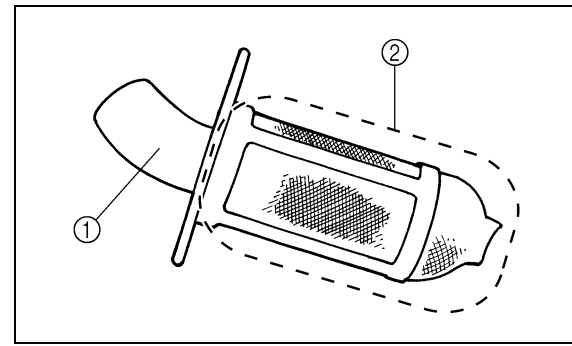
Spark arrester cleaning

Be sure the exhaust pipe and muffler are cool before cleaning the spark arrester.

1. Remove the bolts.
2. Remove the tailpipe by pulling it out of the muffler.
3. Tap the tailpipe lightly, and then use a wire brush to remove any carbon deposits from the spark arrester portion of the tailpipe.
4. Insert the tailpipe into the muffler and align the bolt holes.
5. Install and tighten the bolts.



1. Bolt (× 3)



1. Tailpipe
2. Spark arrester

⚠ WARNING

POTENTIAL HAZARD

Improper cleaning of the spark arrester.
Hot exhaust system

WHAT CAN HAPPEN

Could injure the eyes.
Could cause burns.
Could cause carbon monoxide poisoning, possibly leading to death.
Could start a fire.

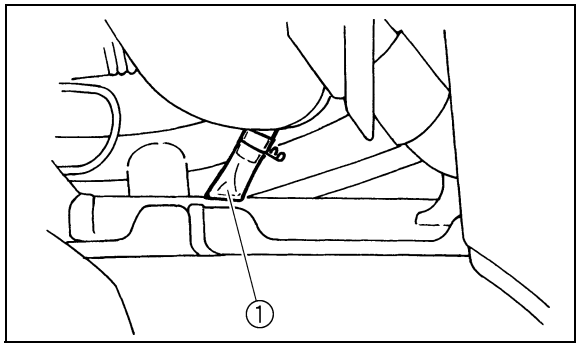
HOW TO AVOID THE HAZARD

When cleaning the spark arrester:
Always let the exhaust system cool prior to touching exhaust components.
Do not start the engine when cleaning the exhaust system.

EBU06411

V-belt cooling duct check hose

If dust or water collects in the V-belt cooling duct check hose, remove the hose and clean it.



1. V-belt cooling duct check hose (Left side)

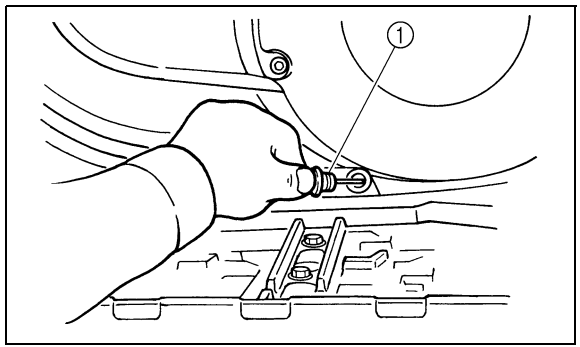
EBU08741

V-belt case drain plug

After riding in water deep enough to allow it to enter the V-belt case, remove this plug to drain the water from the case.

NOTE:

If water drains from the V-belt case after removing the plug, have a Yamaha dealer inspect the ATV as the water may affect other engine parts.



1. V-belt case drain plug

EBU00296

Carburetor adjustment

The carburetor is a vital part of the engine and requires very sophisticated adjustment. Most adjusting should be left to a Yamaha dealer who has the professional knowledge and experience to do so. However, the idling speed may be performed by the owner as a part of the usual maintenance routine.

CAUTION:

The carburetor was set at the Yamaha factory after many tests. If the settings are disturbed by someone without sufficient technical knowledge, poor engine performance and damage may result.

EBU12580

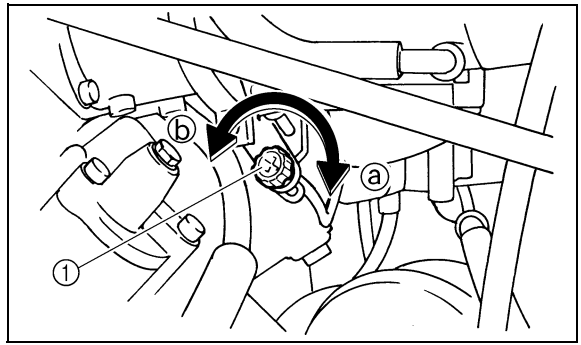
Idle speed adjustment

NOTE:

A diagnostic tachometer must be used for this procedure.

1. Start the engine and warm it up for a few minutes at approximately 1,000 to 2,000 r/min. Occasionally rev the engine to 4,000 to 5,000 r/min. The engine is warm when it quickly responds to the throttle.
2. Remove panel D. (See pages 8-7 and 8-8 for removal and installation procedures.)
3. Connect the tachometer to the spark plug lead, and then set the idle to the specified idling speed by adjusting the throttle stop screw. Turn the screw in direction ⓐ to increase the engine speed, and in direction ⓑ to decrease the engine speed.

Specified idle speed:
1,450–1,550 r/min



1. Throttle stop screw

4. Install the panel.

EBU00303

Valve clearance adjustment

The correct valve clearance changes with use, resulting in improper fuel/air supply or engine noise. To prevent this, the valve clearance must be adjusted regularly. This adjustment however, should be left to a professional Yamaha service technician.

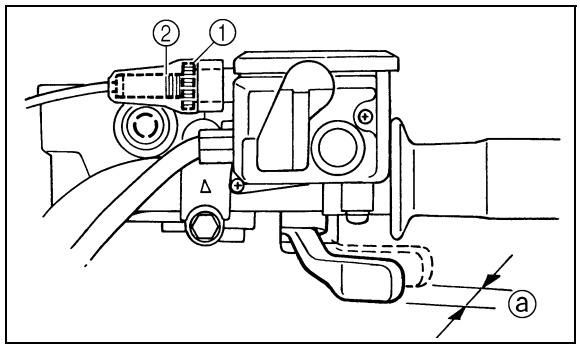
EBU00307

Throttle lever adjustment

NOTE:

Adjust the engine idling speed before adjusting the throttle lever free play.

1. Loosen the locknut.
2. Turn the adjusting bolt until the throttle lever free play is 3–5 mm (0.12–0.20 in).
3. Tighten the locknut.



1. Locknut
2. Adjusting bolt

a. Throttle lever free play

EBU03050

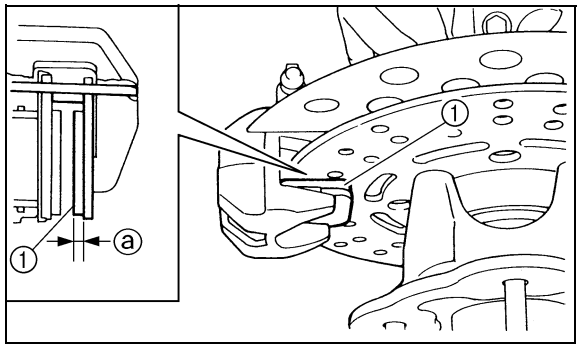
Select lever safety system cable adjustment

The select lever safety system cable stretches with use, resulting in improper function. To prevent this, the cable must be adjusted regularly. This adjustment, however, should be left to a Yamaha dealer.

EBU13090

Front brake pad check

Check the brake pads for damage and wear. If a brake pad thickness is less than 1 mm (0.04 in), have a Yamaha dealer replace the pads as a set.



1. Brake pad
a. Brake pad thickness

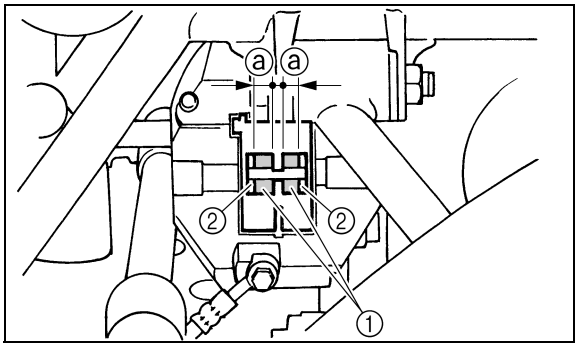
NOTE:

The wheels need to be removed to check the brake pads. (See pages 8-53–8-54 for removal and installation procedures.)

EBU08781

Checking the rear brake pads

Check the brake pads for damage and wear. If the thickness is less than 1.0 mm (0.04 in), have a Yamaha dealer replace the pads.



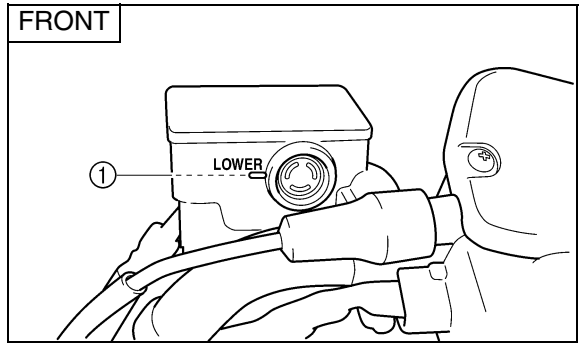
1. Brake pad
2. Brake pad plate
a. Brake pad thickness

EBU08751

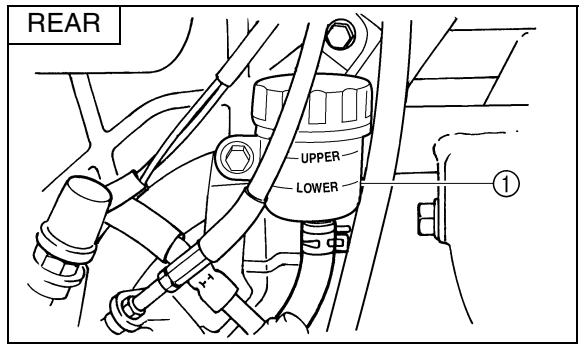
Checking the brake fluid level

Insufficient brake fluid may let air enter the brake system, possibly causing the brakes to become ineffective.

Before riding, check that the brake fluid is above the minimum level and replenish when necessary. A low brake fluid level may indicate worn brake pads and/or brake system leakage. If the brake fluid level is low, be sure to check the brake pads for wear and the brake system for leakage. The rear brake fluid master cylinder reservoir is located behind panel B. (See page 8-9 for panel removal and installation procedures.)



1. Minimum level mark



1. Minimum level mark

Observe these precautions:

- When checking the fluid level, make sure the top of the master cylinder reservoirs are level.
- Use only the designated quality brake fluid, otherwise the rubber seals may deteriorate, causing leakage and poor brake performance.

Recommended brake fluid: DOT 4

- Refill with the same type of brake fluid. Mixing fluids may result in a harmful chemical reaction and lead to poor brake performance.
- Be careful that water does not enter the master cylinder reservoirs when refilling. Water will significantly lower the boiling point of the fluid and may result in vapor lock.
- Brake fluid may deteriorate painted surfaces or plastic parts. Always clean up spilled fluid immediately.
- Have a Yamaha dealer check the cause if the brake fluid level goes down.

EBU11860

Brake fluid replacement

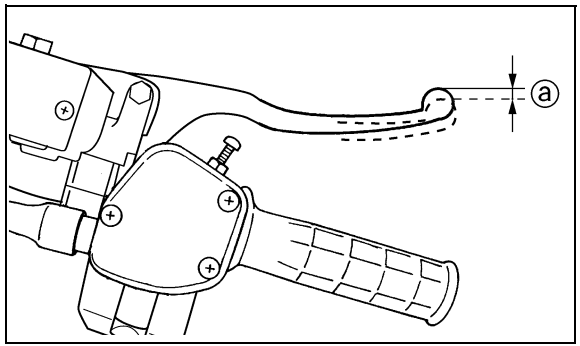
Complete fluid replacement should be done only by trained Yamaha service personnel. Have a Yamaha dealer replace the following components during periodic maintenance or when they are damaged or leaking.

- Replace the oil seals every two years.
- Replace the brake hoses every four years.

EBU11870

Front brake lever free play

The front brake lever should have a free play of zero mm (zero in) at the lever end. If not, have a Yamaha dealer check the brake system.



a. Front brake lever free play

⚠ WARNING

POTENTIAL HAZARD

Operating with improperly serviced or adjusted brakes.

WHAT CAN HAPPEN

You could lose braking ability, which could lead to an accident.

HOW TO AVOID THE HAZARD

After servicing:

- **Make sure the brakes operate smoothly and that the free play is correct.**
- **Make sure the brakes do not drag.**
- **Make sure the brakes are not spongy. All air must be bled from the brake system.**

Replacement of brake components requires professional knowledge. These procedures should be performed by a Yamaha dealer.

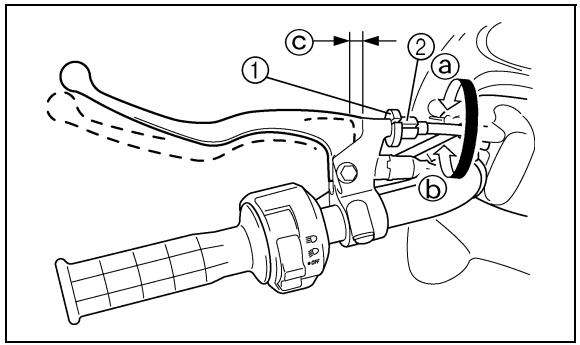
EBU09631

Adjusting the rear brake lever and brake pedal

Adjusting the rear brake lever

The rear brake lever free play should be 0.5–2 mm (0.02–0.08 in).

1. Loosen the locknut.



1. Locknut
2. Adjusting bolt

c. Rear brake lever free play

2. Turn the adjusting bolt in direction ⓐ to increase free play, and in direction ⓑ to decrease free play.
3. Tighten the locknut.

If correct free play cannot be obtained, ask a Yamaha dealer to make that adjustment.

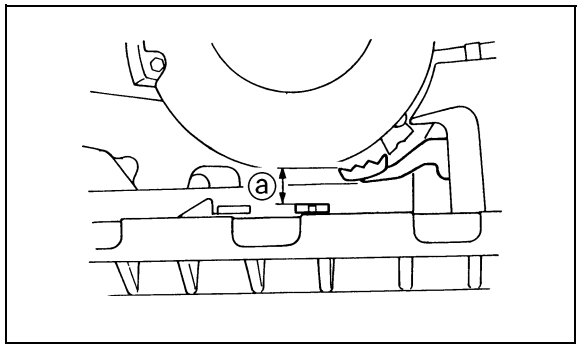
NOTE:

When adjusting the rear brake lever free play:

- Be sure not to step on the brake pedal.
- Make sure the brake pedal does not move.

Adjusting the brake pedal

The top of the brake pedal should be positioned 72 mm (2.8 in) above the top of the footrest. If not, ask a Yamaha dealer to adjust it.



a. Distance between brake pedal and footrest

⚠ WARNING

POTENTIAL HAZARD

Operating with improperly serviced or adjusted brakes.

WHAT CAN HAPPEN

You could lose braking ability, which could lead to an accident.

HOW TO AVOID THE HAZARD

After servicing:

- **Make sure the brakes operate smoothly and that the free play is correct.**
- **Make sure the brakes do not drag.**
- **All air must be bled from the brake system.**

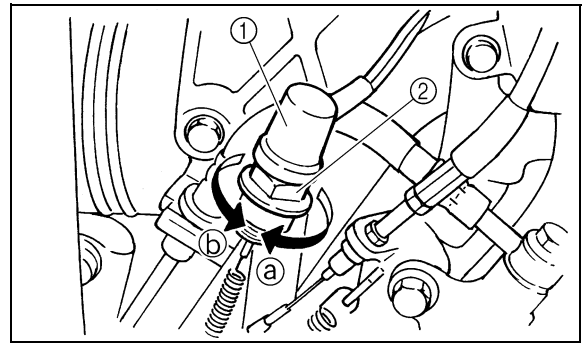
Replacement of brake components requires professional knowledge. These procedures should be performed by a Yamaha dealer.

EBU12590

Adjusting the rear brake light switch

The rear brake light switch, which is activated by the brake pedal and rear brake lever, is properly adjusted when the brake light comes on just before braking takes effect. If necessary, adjust the brake light switch as follows.

1. Remove panel B. (See page 8-9 for panel removal and installation procedures.)
2. Turn the adjusting nut while holding the rear brake light switch in place. To make the brake light come on earlier, turn the adjusting nut in direction ⓐ. To make the brake light come on later, turn the adjusting nut in direction ⓑ.



1. Rear brake light switch 2. Adjusting nut

3. Install the panel.

EBU00356

Cable inspection and lubrication

⚠ WARNING

POTENTIAL HAZARD

Damaged control cables.

WHAT CAN HAPPEN

Corrosion can result when the outer covering of control cables becomes damaged. Cables can also become frayed or kinked. Operation of controls could be restricted, which could cause an accident or injury.

HOW TO AVOID THE HAZARD

Inspect cables frequently. Replace damaged cables.

Lubricate the inner cables and the cable ends. If the cables do not operate smoothly, ask a Yamaha dealer to replace them.

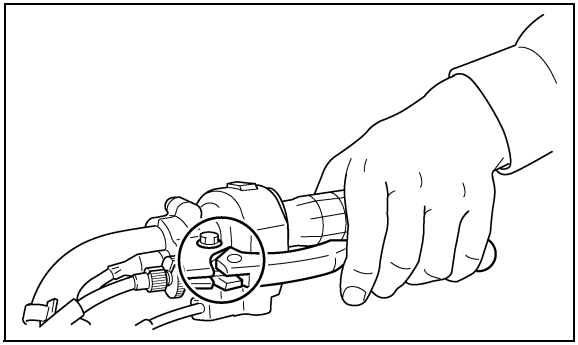
Recommended lubricant:
Yamaha chain and cable lube or
SAE 10W30 motor oil

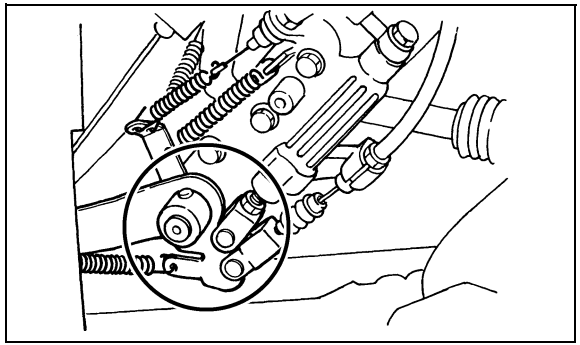
EBU00717

Brake lever and brake pedal lubrication

Lubricate the pivoting parts.

Recommended lubricant:
Lithium-soap-based grease
(all-purpose grease)

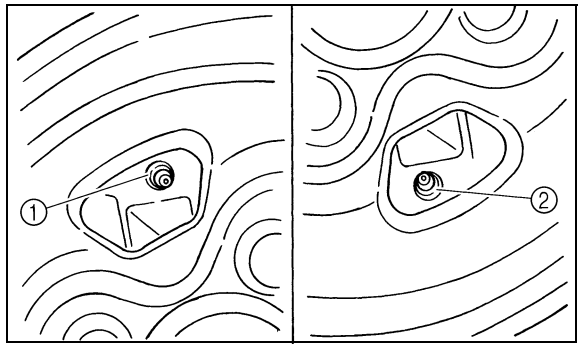




EBU13110

Rear knuckle upper and lower pivot lubrication

Lubricate the knuckle upper and lower pivots with a grease gun.



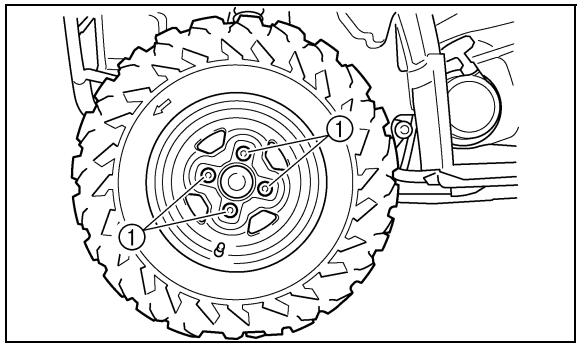
1. Upper knuckle
2. Lower knuckle

Recommended lubricant:
Lithium-soap-based grease

EBU01112

Wheel removal

1. Loosen the wheel nuts.
2. Elevate the ATV and place a suitable stand under the frame.
3. Remove the nuts from the wheel.
4. Remove the wheel.



1. Nut (× 4)

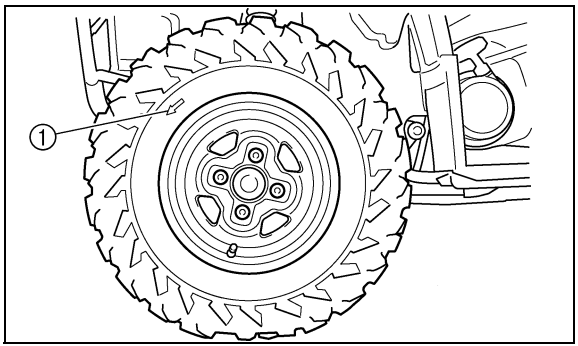
EBU01121

Wheel installation

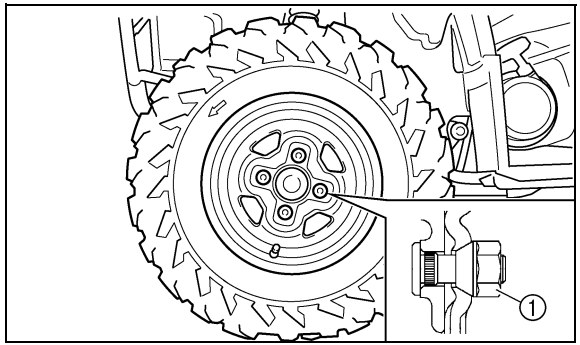
1. Install the wheel and the nuts.

NOTE:

- Tapered nuts are used for both the front and rear wheels. Install the nut with its tapered side towards the wheel.
- The arrow mark ⇗ on the tire must point toward the rotating direction of the wheel.



1. Arrow mark



1. Tapered nut

2. Lower the ATV so that the wheel is on the ground.
3. Tighten the wheel nuts to the specified torque.

Wheel nut torque:
Front: 55 Nm (5.5 m·kgf, 40 ft·lbf)
Rear: 55 Nm (5.5 m·kgf, 40 ft·lbf)

EBU00380

Battery

This machine is equipped with a sealed-type battery. Therefore it is not necessary to check the electrolyte or add distilled water in the battery. If the battery seems to have discharged, consult a Yamaha dealer.

CAUTION:

Do not try to remove the sealing caps of the battery cells. You may damage the battery.

⚠ WARNING

POTENTIAL HAZARD

Failure to handle batteries or battery electrolyte carefully.

WHAT CAN HAPPEN

You could be poisoned. You could be severely burned by the sulfuric acid in battery electrolyte. Batteries produce explosive gases.

HOW TO AVOID THE HAZARD

Avoid contact with skin, eyes or clothing. Always shield eyes when working near batteries. Keep out of reach of children.

Antidote:

EXTERNAL: Flush with water.

INTERNAL: Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Get prompt medical attention.

EYES: Flush with water for 15 minutes and get prompt medical attention. Keep batteries away from sparks, flames, cigarettes or other sources of ignition. Ventilate when charging or using in a closed space.

EBU00385

Battery maintenance

1. When the machine is not used for a month or longer, remove the battery and store it in a cool, dark place. Completely recharge the battery before reinstallation.

CAUTION:

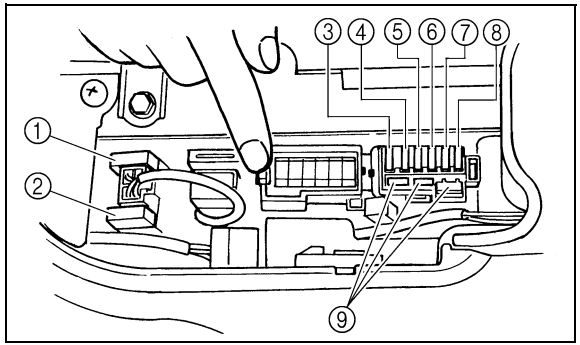
A special battery charger (constant voltage/ampere or constant voltage) is required for recharging a sealed-type battery. Using a conventional battery charger may shorten the battery life.

2. Always make sure the connections are correct when putting the battery back in the machine.

EBU08762*

Fuse replacement

1. The main fuse and the fuse box are located under the seat.
2. If a fuse is blown, turn off the main switch and the switch of the circuit in question. Then, install a new fuse of the specified amperage. Turn on the main switch. If the fuse immediately blows again, consult a Yamaha dealer.



1. Main fuse
2. Spare main fuse
3. Headlight fuse
4. Ignition fuse
5. Auxiliary DC jack fuse
6. Four-wheel drive fuse
7. Signaling system fuse
8. Backup fuse (for odometer and clock)
9. Spare fuse (× 3)

Specified fuses:	
Main fuse:	30 A
Headlight fuse:	15 A
Ignition fuse:	10 A
Auxiliary DC jack fuse:	10 A
Four-wheel drive fuse:	3 A
Signaling system fuse:	10 A
Backup fuse:	10 A

⚠ WARNING

POTENTIAL HAZARD

Using an improper fuse.

WHAT CAN HAPPEN

An improper fuse can cause damage to the electrical system which could lead to a fire.

HOW TO AVOID THE HAZARD

Always use a fuse of the specified rating. Never use a material in place of the proper fuse.

CAUTION:

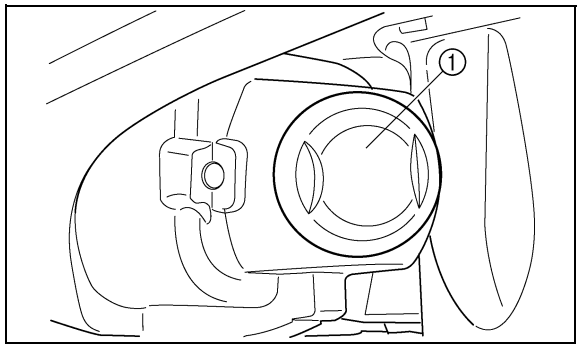
To prevent accidental short-circuiting, turn off the main switch when checking or replacing a fuse.

EBU11252

Replacing a headlight bulb

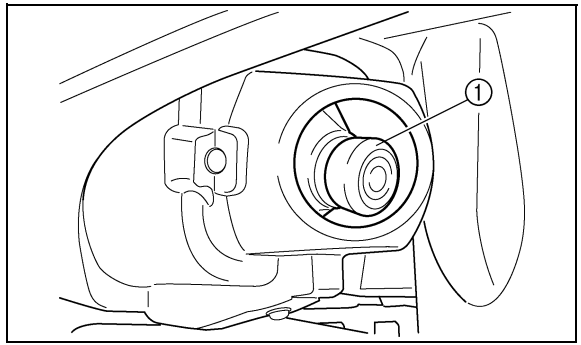
If a headlight bulb burns out, replace it as follows.

1. Remove the cover at the rear of the headlight by pulling it off.



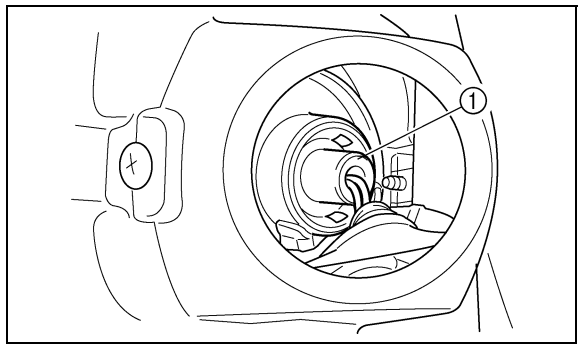
1. Cover

2. Remove the headlight bulb holder cover by pulling it off.



1. Headlight bulb holder cover

3. Remove the headlight bulb holder by pushing it in and turning it counterclockwise.



1. Headlight bulb holder

4. Remove the defective bulb by pulling it out.

⚠ WARNING

POTENTIAL HAZARD

A headlight bulb is hot when it is on and immediately after it is turned off.

WHAT CAN HAPPEN

You can be burned, or a fire could start if the bulb touches something flammable.

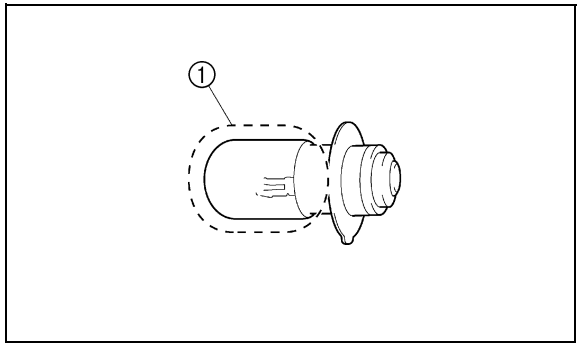
HOW TO AVOID THE HAZARD

Wait for the bulb to cool before touching or removing it.

5. Insert a new headlight bulb into the bulb holder by pushing it in.

CAUTION:

Do not touch the glass part of the headlight bulb to keep it free from oil, otherwise the transparency of the glass, the luminosity of the bulb, and the bulb life will be adversely affected. Thoroughly clean off any dirt and fingerprints on the headlight bulb using a cloth moistened with alcohol or thinner.



1. Do not touch the glass part of the bulb.

6. Install the bulb holder by pushing it in and turning it clockwise.
7. Install the bulb holder cover and the cover at the rear of the headlight.

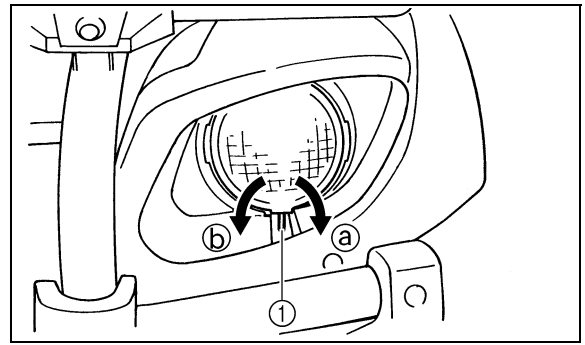
EBU01089

Headlight beam adjustment

CAUTION:

It is advisable to have a Yamaha dealer make this adjustment.

To raise the beam, turn the adjusting screw in direction ⓐ.
To lower the beam, turn the adjusting screw in direction ⓑ.

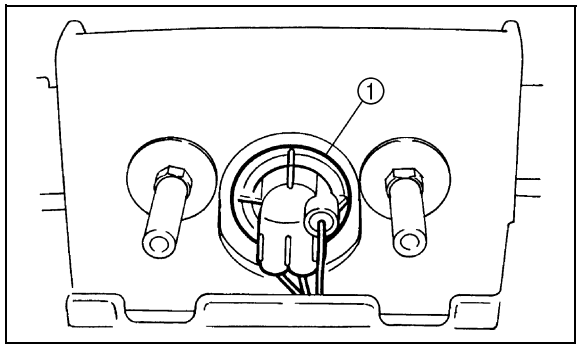


1. Headlight beam adjusting screw

EBU15050

Tail/brake light bulb replacement

1. Remove panel G. (See pages 8-14–8-15 for removal and installation procedures.)
2. Remove the bulb holder (together with the bulb) by turning it counterclockwise.



1. Bulb holder

3. Remove the defective bulb from the bulb holder by pushing it inward and turning it counterclockwise.
4. Install a new bulb in the bulb holder by pushing it inward and turning it clockwise.
5. Install the bulb holder (together with the bulb).
6. Install the panel.

EBU00412

Troubleshooting

Although Yamaha machines receive a rigid inspection before shipment from the factory, trouble may occur during operation. Any problem in the fuel, compression, or ignition systems can cause poor starting and loss of power. The troubleshooting chart describes a quick, easy procedure for making checks. If your machine requires any repair, take it to a Yamaha dealer.

The skilled technicians at a Yamaha dealership have the tools, experience, and know-how to properly service your machine. Use only genuine Yamaha parts on your machine. Imitation parts may look like Yamaha parts, but they are often inferior. Consequently, they have a shorter service life and can lead to expensive repair bills.

⚠ WARNING

POTENTIAL HAZARD

Checking the fuel system while smoking or near an open flame.

WHAT CAN HAPPEN

Fuel can ignite or explode, causing severe injury or property damage.

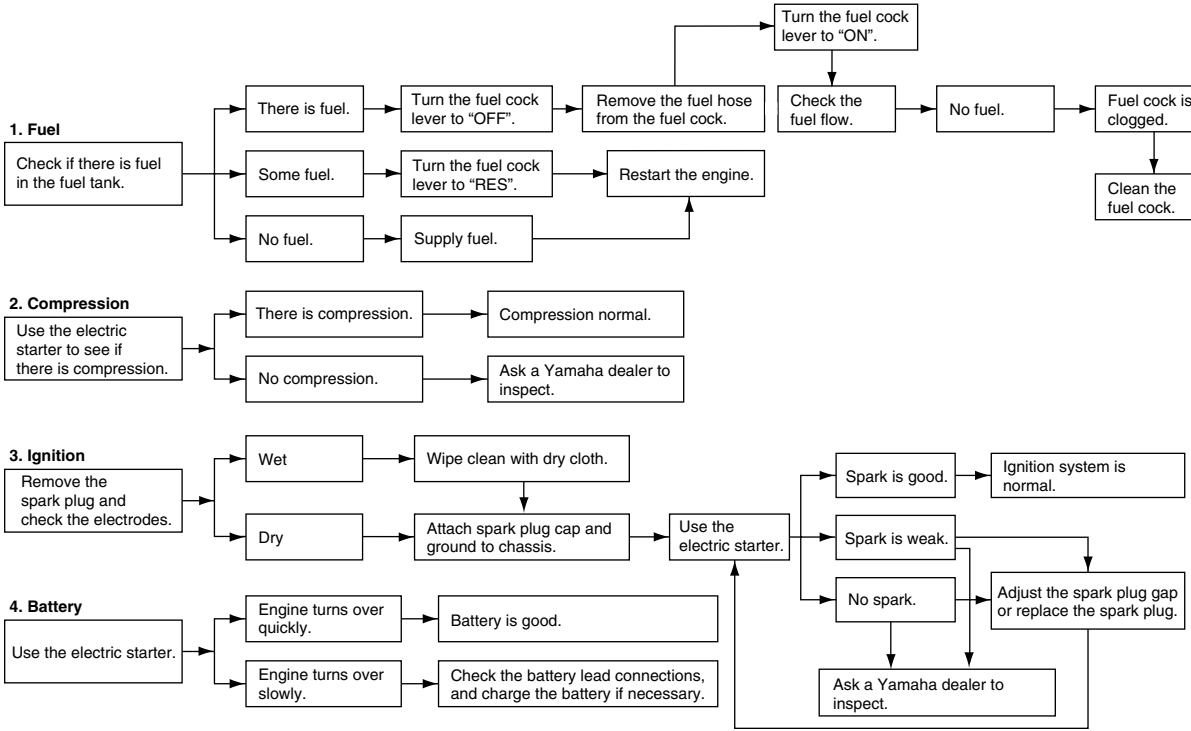
HOW TO AVOID THE HAZARD

Do not smoke when checking the fuel system. Make sure there are no open flames or sparks in the area, including pilot lights from water heaters or furnaces.

EBU08061

Troubleshooting charts

Starting problems or poor engine performance


1. Fuel
Check if there is fuel in the fuel tank.
There is fuel.
Turn the fuel cock lever to “OFF”.
Remove the fuel hose from the fuel cock.
Turn the fuel cock lever to “ON”.
Check the fuel flow.
No fuel.
Fuel cock is clogged.
Clean the fuel cock.
Some fuel.
Turn the fuel cock lever to “RES”.
Restart the engine.
No fuel.
Supply fuel.
2. Compression
Use the electric starter to see if there is compression.
There is compression.
Compression normal.
No compression.
Ask a Yamaha dealer to inspect.
3. Ignition
Remove the spark plug and check the electrodes.
Wet
Wipe clean with dry cloth.
Dry
Attach spark plug cap and ground to chassis.
Use the electric starter.
Spark is good.
Ignition system is normal.
Spark is weak.
No spark.
Adjust the spark plug gap or replace the spark plug.
Ask a Yamaha dealer to inspect.
4. Battery
Use the electric starter.
Engine turns over quickly.
Battery is good.
Engine turns over slowly.
Check the battery lead connections, and charge the battery if necessary.

Engine overheating

⚠ WARNING

POTENTIAL HAZARD

Removing the radiator cap when the engine and radiator are still hot.

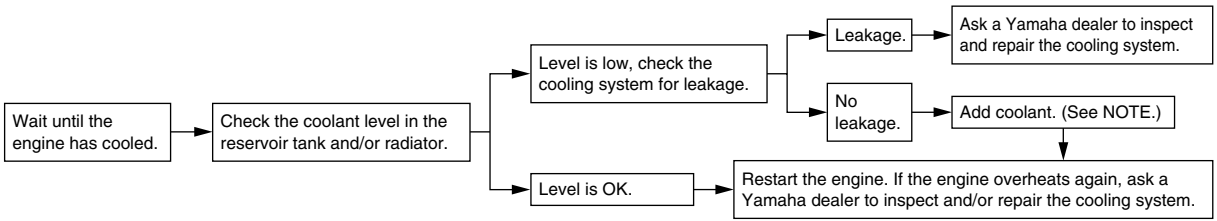
WHAT CAN HAPPEN

You could be burned by hot fluid and steam blown out under pressure.

HOW TO AVOID THE HAZARD

Wait for the engine to cool before removing the radiator cap.

Always use a thick rag over the cap. Allow any remaining pressure to escape before completely removing the cap.


Wait until the engine has cooled.
Check the coolant level in the reservoir tank and/or radiator.
Level is low, check the cooling system for leakage.
Leakage.
Ask a Yamaha dealer to inspect and repair the cooling system.
No leakage.
Add coolant. (See NOTE.)
Level is OK.
Restart the engine. If the engine overheats again, ask a Yamaha dealer to inspect and/or repair the cooling system.

NOTE:

If it is difficult to get the recommended coolant, tap water can be temporarily used, provided that it is changed to the recommended coolant as soon as possible.

EBU00419

CLEANING AND STORAGE

A. CLEANING

Frequent, thorough cleaning of your machine will not only enhance its appearance but will improve its general performance and extend the useful life of many components.

1. Before cleaning the machine:
   a. Block off the end of the exhaust pipe to prevent water entry. A plastic bag and strong rubber band may be used.
   b. Make sure the spark plug and all filler caps are properly installed.
2. If the engine case is excessively greasy, apply degreaser with a paint brush. Do not apply degreaser to the wheel axles.
3. Rinse the dirt and degreaser off with a garden hose. Use only enough pressure to do the job.

CAUTION:

Excessive water pressure may cause water seepage and deterioration of wheel bearings, brakes, transmission seals and electrical devices. Many expensive repair bills have resulted from improper high pressure detergent applications such as those available in coin-operated car washers.

4. Once the majority of the dirt has been hosed off, wash all surfaces with warm water and mild, detergent-type soap. An old toothbrush or bottle brush is handy for hard-to-get-at places.
5. Rinse the machine off immediately with clean water and dry all surfaces with a chamois, clean towel or soft absorbent cloth.

6. Clean the seat with a vinyl upholstery cleaner to keep the cover pliable and glossy.
7. Automotive type wax may be applied to all painted and chrome plated surfaces. Avoid combination cleaner-waxes. Many contain abrasives which may mar the paint or protective finish. When finished, start the engine and let it idle for several minutes.

⚠ WARNING

POTENTIAL HAZARD

Operation with wet brakes after washing.

WHAT CAN HAPPEN

Wet brakes may have reduced stopping ability, increasing the chance of an accident.

HOW TO AVOID THE HAZARD

Test the brakes after washing. Apply the brakes several times at slow speeds to let friction dry out the linings.

EBU00530

B. STORAGE

Long term storage (60 days or more) of your machine will require some preventive procedures to guard against deterioration. After thoroughly cleaning the machine, prepare for storage as follows:

1. Fill the fuel tank with fresh fuel and add the specified amount of Yamaha Fuel Stabilizer and Conditioner or an equivalent product.

Specified amount:
1 oz of stabilizer to each gallon of fuel (or 7.5 cc of stabilizer to each liter of fuel)

NOTE:

Use of fuel stabilizer and conditioner eliminates the need to drain the fuel system. Consult a Yamaha dealer if the fuel system needs to be drained instead.

2. Remove the spark plug, pour about one tablespoon of SAE 10W30 or 20W40 motor oil in the spark plug hole and reinstall the spark plug. Ground the spark plug wire and turn the engine over several times to coat the cylinder wall with oil.
3. Lubricate all control cables.
4. Block up the frame to raise all wheels off the ground.
5. Tie a plastic bag over the exhaust pipe outlet to prevent moisture from entering.
6. If storing in a humid or salt-air atmosphere, coat all exposed metal surfaces with a light film of oil. Do not apply oil to any rubber parts or the seat cover.

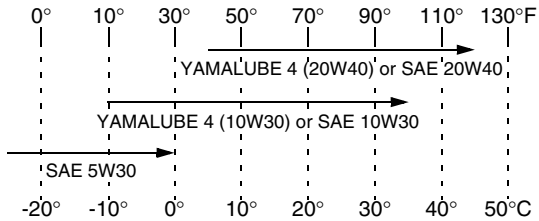
7. Remove the battery and charge it. Store it in a dry place and recharge it once a month. Do not store the battery in an excessively warm or cold place (less than 0 °C (30 °F) or more than 30 °C (90 °F)).

NOTE:
Make any necessary repairs before storing the machine.

EBU00428

SPECIFICATIONS

Model	YFM660FA
Dimensions:	
Overall length	2,085 mm (82.1 in)
Overall width	1,150 mm (45.3 in)
Overall height	1,210 mm (47.6 in)
Seat height	880 mm (34.6 in)
Wheelbase	1,275 mm (50.2 in)
Ground clearance	275 mm (10.8 in)
Minimum turning radius	3,200 mm (126.0 in)
Basic weight:	
With oil and full fuel tank	290 kg (639 lb)
Engine:	
Engine type	Liquid-cooled 4-stroke, SOHC
Cylinder arrangement	Forward-inclined single cylinder
Displacement	660 cm^3
Bore × stroke	100 × 84 mm (3.94 × 3.31 in)
Compression ratio	9.1 :1
Starting system	Electric and recoil starter
Lubrication system	Wet sump

Model	YFM660FA
Engine oil: Type	
Recommended engine oil classification	API Service SE, SF, SG type or higher
	CAUTION: **In order to prevent clutch slippage (since the engine oil also lubricates the clutch), do not mix any chemical additives. Do not use oils with a diesel specification of "CD" or oils of a higher quality than specified. In addition, do not use oils labeled "ENERGY CONSERVING II" or higher.**
Quantity:	
Without oil filter cartridge replacement	1.9 L (1.67 Imp qt, 2.01 US qt)
With oil filter cartridge replacement	2.0 L (1.76 Imp qt, 2.11 US qt)

Model	YFM660FA
Final gear case oil:	
Type	SAE80 API GL-4 Hypoid gear oil
Quantity	0.25 L (0.22 Imp qt, 0.26 US qt)
Differential gear case oil:	
Type	SAE80 API GL-4 Hypoid gear oil
Quantity	0.28 L (0.25 Imp qt, 0.30 US qt)
Radiator capacity (including all routes):	1.80 L (1.58 Imp qt, 1.90 US qt)
Air filter:	Wet type element
Fuel:	
Type	UNLEADED GASOLINE ONLY
Fuel tank capacity	20 L (4.40 Imp gal, 5.28 US gal)
Fuel reserve amount	3.5 L (0.77 Imp gal, 0.92 US gal)
Carburetor:	
Type / quantity	BSR42 / 1
Manufacturer	MIKUNI
Spark plug:	
Type/manufacturer	DPR8EA-9 / NGK
Spark plug gap	0.8–0.9 mm (0.031–0.035 in)
Clutch type:	Wet, centrifugal automatic

Model		YFM660FA
Transmission:		
Primary reduction system		V-belt
Secondary reduction system		Shaft drive
Secondary reduction ratio		41/21 × 24/18 × 33/9 (9.544)
Transmission type		V-belt automatic
Operation		Left hand operation
Reverse gear		25/17 (1.471)
Sub transmission ratio	low	35/17 (2.058)
	high	26/21 (1.238)
Chassis:		
Frame type		Steel tube frame
Caster angle		5°
Trail		26 mm (1.02 in)
Tire:		
Type		Tubeless
Size	front	AT25 × 8 - 12
	rear	AT25 × 10 - 12

Model		YFM660FA
Brake:		
Front brake	type	Dual disc brake
	operation	Right hand operation
Rear brake	type	Single disc brake
	operation	Left hand and right foot operation
Suspension:		
Front suspension		Double wishbone
Rear suspension		Double wishbone
Shock absorber:		
Front shock absorber		Coil spring / oil damper
Rear shock absorber		Coil spring / oil damper
Wheel travel:		
Front wheel travel		170 mm (6.69 in)
Rear wheel travel		225 mm (8.86 in)
Electrical:		
Ignition system		DC. C.D.I.
Generator system		A.C. magneto
Battery type		YTX20L-BS
Battery capacity		12 V, 18 Ah
Headlight type:		Krypton bulb

Model	YFM660FA
Bulb voltage, wattage × quantity:	
Headlight	12 V, 30 W / 30 W × 2
Tail/brake light	12 V, 5 W / 21 W × 1
Indicator light:	
Neutral indicator light	LED
Reverse indicator light	LED
Coolant temperature warning light	LED
Park indicator light	LED
High-range indicator light	LED
Low-range indicator light	LED
Differential gear lock indicator light	LED
Fuses:	
Main fuse	30A
Headlight fuse	15A
Ignition fuse	10A
Auxiliary DC jack fuse	10A
Four-wheel-drive fuse	3A
Signaling system fuse	10A
Backup fuse	10A

NOISE REGULATION

TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED:

Federal law prohibits the following acts or the causing thereof: (1) The removal or rendering inoperative by any person other than for purposes of maintenance, repair, or replacement of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use or (2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

“AMONG THOSE ACTS PRESUMED TO CONSTITUTE TAMPERING ARE THE ACTS LISTED BELOW.”

These acts include tampering with the following systems; i.e., modification, removal, etc.

Exhaust system	Muffler Exhaust pipe Silencer
Intake system	Air cleaner case Air cleaner element Intake duct

EBU13653

MAINTENANCE RECORD

Copies of work orders and/or receipts for parts you purchase and install will be required to document maintenance done in accordance with the warranty. The chart below is printed only as a reminder to you that the maintenance work is required. It is not acceptable proof of maintenance work.

MAINTENANCE INTERVAL			DATE OF SERVICE	MILEAGE	SERVICING DEALER NAME AND ADDRESS	REMARKS
month	km (mi)	hours				
1	320 (200)	20				
3	1,200 (750)	75				
6	2,400 (1,500)	150				
12	4,800 (3,000)	300				
18	7,200 (4,500)	450				
24	9,600 (6,000)	600				
30	12,000 (7,500)	750				
36	14,400 (9,000)	900				
42	16,800 (10,500)	1,050				
48	19,200 (12,000)	1,200				
54	21,600 (13,500)	1,350				
60	24,000 (15,000)	1,500				

YAMAHA MOTOR CORPORATION, U.S.A.
ATV LIMITED WARRANTY

Yamaha Motor Corporation, U.S.A. hereby warrants that each new Yamaha ATV purchased from an authorized Yamaha ATV dealer in the continental United States will be free from defects in material and workmanship for the period of time stated herein, subject to certain stated limitations.

THE PERIOD OF WARRANTY for Yamaha ATVs shall be six (6) months from the date of purchase.

DURING THE PERIOD OF WARRANTY any authorized Yamaha ATV dealer will, free of charge, repair or replace, at Yamaha's option, any part adjudged defective by Yamaha due to faulty workmanship or material from the factory. Parts used in warranty repairs will be warranted for the balance of the product's warranty period. All parts replaced under warranty become property of Yamaha Motor Corporation U.S.A.

GENERAL EXCLUSIONS from this warranty shall include any failures caused by:

a. Competition or racing use.
b. Installation of parts or accessories that are not qualitatively equivalent to genuine Yamaha parts.
c. Abnormal strain, neglect, or abuse.
d. Lack of proper maintenance.
e. Accident or collision damage.
f. Modification to original parts.
g. Damage due to improper transportation.

SPECIFIC EXCLUSIONS from this warranty shall include parts replaced due to normal wear or routine maintenance; such as spark plugs, oil, oil filter, air filter, and brake shoes.

THE CUSTOMER'S RESPONSIBILITY under this warranty shall be to:

1. Operate and maintain the ATV as specified in the appropriate owner's manual;
2. Give notice to an authorized Yamaha ATV dealer of any and all apparent defects within ten (10) days after discovery, and make the machine available at that time for inspection and repairs at such dealer's place of business.

WARRANTY TRANSFER: To transfer the warranty from the original purchaser to any subsequent purchaser(s), it is imperative that the machine be inspected and registered for warranty by an authorized Yamaha ATV dealer. In order for this warranty to remain in effect, this inspection and registration must take place within ten (10) days after transfer. An inspection and registration fee will be charged for this service.

YAMAHA MOTOR CORPORATION, U.S.A. MAKES NO OTHER WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED THE OBLIGATIONS AND TIME LIMITS STATED IN THIS WARRANTY ARE HEREBY DISCLAIMED BY YAMAHA MOTOR CORPORATION, U.S.A. AND EXCLUDED FROM THIS WARRANTY.

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. ALSO EXCLUDED FROM THIS WARRANTY ARE ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING LOSS OF USE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

YAMAHA MOTOR CORPORATION, U.S.A.
P.O. Box 6555
Cypress, California 90630

Q: What costs are my responsibility during the warranty period?
A: The customer's responsibility includes all costs of normal maintenance services, non-warranty repairs, accident and collision damage, and oil, oil filters, air filters, spark plugs, and brake shoes or pads.

Q: What are some examples of "abnormal" strain, neglect, or abuse?
A: These terms are general and overlap each other in areas. Specific examples include: Running the machine out of oil; sustained high-rpm, full-throttle use; operating the machine with a broken or damaged part which causes another part to fail; damage or failure due to improper or careless transportation and or tie down; and so on.
If you have any specific questions on operation or maintenance, please contact your dealer for advice.

Q: Does the warranty cover incidental costs such as towing or transportation due to a failure?
A: No. The warranty is limited to repair of the machine itself.

Q: May I perform any or all of the recommended maintenance shown in the Owner's Manual instead of having the dealer do them?
A: Yes, if you are a qualified mechanic and follow the procedures specified in the Owner's and Service Manual. We do recommend, however, that items requiring special tools or equipment be done by a Yamaha ATV dealer.

Q: Will the warranty be void or cancelled if I do not operate or maintain my new ATV exactly as specified in the Owner's Manual?
A: No. The warranty on a new ATV cannot be "voided" or "cancelled". **However, if a particular failure is caused by operation or maintenance other than as shown in the Owner's Manual, that failure may not be covered under warranty**.

Q: What responsibility does my dealer have under this warranty?
A: Each Yamaha ATV dealer is expected to:
1. Completely set up every new machine before sale.
2. Explain the operation, maintenance, and warranty requirements to your satisfaction at the time of sale, and upon your request at any later date.

In addition, each Yamaha ATV dealer is held responsible for his setup, service and warranty repair work.

Q: Is the warranty transferable to second owners?
A: Yes. The reminder of the existing warranty can be transferred upon request. The unit has to be inspected and re-registered by an authorized Yamaha ATV dealer for the warranty coverage to remain effective.

CUSTOMER SERVICE

If your machine requires warranty service, you must take it to any authorized Yamaha ATV dealer within the continental United States. Be sure to bring your warranty registration identification or other valid proof of the original date of purchase. If a question or problem arises regarding warranty, first contact the owner of the dealership. Since all warranty matters are handled at the dealer level, this person is in the best position to help you. If you are still not satisfied and require additional assistance, please write:

YAMAHA MOTOR CORPORATION U.S.A.
CUSTOMER RELATIONS DEPARTMENT
P.O Box 6555
Cypress, California 90630

When contacting Yamaha Motor Corporation, U.S.A. don't forget to include any important information such as names, addresses, model, engine serial number, frame number, dates, and receipts.

CHANGE OF ADDRESS

The federal government requires each manufacturer of a motor vehicle to maintain a complete, up-to-date list of all first purchasers against the possibility of a safety-related defect and recall. This list is compiled from the purchases registrations sent to Yamaha Motor Corporation, U.S.A. by the selling dealer at the time of your purchase.

If you should move after you have purchased your new ATV, please advise us of your new address by sending a postcard listing your ATV model name, engine serial number, dealer number (or dealer's name) as it is shown on your warranty identification, your name and new mailing address. Mail to:

YAMAHA MOTOR CORPORATION, U.S.A.
WARRANTY DEPARTMENT
P.O. Box 6555
Cypress, California 90630

This will ensure that Yamaha Motor Corporation, U.S.A. has an up-to-date registration record in accordance with federal law.

EBU00435

YAMAHA EXTENDED SERVICE (Y.E.S.)

Keep your Yamaha protected even after your warranty expires with genuine Yamaha Extended Service (Y.E.S.).

- Y.E.S. is designed and administered by Yamaha Motor Corporation to provide maximum owner satisfaction. You get uninterrupted factory-backed coverage for extra peace of mind.
- Y.E.S. is flexible. You choose the plan that's right for you: 12 months, 24 months, or 36 months beyond your warranty period.
- Y.E.S. is designed and administered by the same Yamaha people who handle your warranty – and it shows in the comprehensive coverage benefits. There are no mileage limitations. Coverage isn't limited to "moving parts" or the "drive train" like many other plans. And Y.E.S. covers manufacturing defects just like the warranty. See the sample contract at your Yamaha dealer to see how comforting uninterrupted factory-backed protection can be.
- You don't have to pay anything for covered repairs. There's no deductible to pay, and repairs aren't "pro-rated." You don't have any "out-of-pocket" expenses for covered repairs.
- In addition, Travel and Recreation Interruption Protection (TRIP) is included at no extra cost. TRIP gives you up to $150 reimbursement per occurrence for any reasonable expenses you incur because your Yamaha needs covered service: replacement vehicle rental, emergency towing, phone calls, even food and lodging when you are away from home. This superb coverage goes into effect when you purchase Y.E.S., so it applies to any warranty repairs as well as covered repairs during your entire Y.E.S. plan period.
- Y.E.S. coverage is honored at any authorized Yamaha dealer nationwide.
- Y.E.S. coverage is transferable to a new owner if you sell or trade-in. That can make your Yamaha much more valuable!

This excellent Y.E.S. plan coverage is only available to Yamaha owners like you, and only while your Yamaha is still within the Yamaha Limited Warranty period. So visit your authorized Yamaha dealer to get all the facts. He can show you how easy it is to protect your investment with Yamaha Extended Service.

We urge you to act now. You'll get the excellent benefits of TRIP coverage right away, and you'll rest easy knowing you'll have strong factory-backed protection even after your Yamaha Limited Warranty expires. You can also save money: Y.E.S. costs less within the first 90 days after you buy your Yamaha. See your dealer today!

A special note:
If visiting your dealer isn't convenient, contact Yamaha with your Primary ID number (your frame number). We'll be happy to help you get the Y.E.S. coverage you need.

Yamaha Service Marketing
P.O. Box 6555
Cypress, CA 90630

EBU00436

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⚠ WARNING

Indicates a potential hazard that could result in serious injury or death.

EBU00437

PROTECT YOUR INVESTMENT
Use Genuine YAMAHA Parts And Accessories

See your Authorized YAMAHA Dealer for a Genuine YAMAHA Service Manual.

EBU00438

⚠ WARNING

Improper ATV use can result in SEVERE INJURY or DEATH.

ALWAYS USE AN APPROVED HELMET AND PROTECTIVE GEAR

NEVER USE ON PUBLIC ROADS

NEVER CARRY PASSENGERS

NEVER USE WITH DRUGS OR ALCOHOL

NEVER operate:

- without proper training or instruction.
- at speeds too fast for your skills or the conditions.
- on public roads-a collision can occur with another vehicle.
- with a passenger-passengers affect balance and steering and increase risk of losing control.

ALWAYS:

- use proper riding techniques to avoid vehicle overturns on hills and rough terrain and in turns.
- avoid paved surfaces-pavement may seriously affect handling and control.

LOCATE AND READ OWNER'S MANUAL. FOLLOW ALL INSTRUCTIONS AND WARNINGS.
(For replacement manual, call 1-800-532-1558)

YAMAHA

YAMAHA MOTOR CO., LTD.

PRINTED ON RECYCLED PAPER

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2004.03-5.0×1 CR
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Dear Yamaha ATV Owner: Please Review this IMPORTANT SAFETY CARD before operating your ATV (If card is not attached, call 1-800-344-6418).

Dear New Yamaha ATV Owner:

CONGRATULATIONS ON THE PURCHASE OF YOUR NEW YAMAHA ATV. You have purchased a quality Yamaha product that, with proper use and care, will provide hours of riding pleasure. **BEFORE YOU OPERATE YOUR NEW ATV, Yamaha recommends these important points:**

- READ YOUR OWNER'S MANUAL
- A CHILD UNDER 6 YEARS OLD SHOULD NOT OPERATE AN ATV WITH ENGINE SIZE 50CC OR GREATER
- A CHILD UNDER 12 YEARS OLD SHOULD NOT OPERATE AN ATV WITH ENGINE SIZE 70CC OR GREATER
- A CHILD UNDER 16 YEARS OLD SHOULD NOT OPERATE AN ATV WITH ENGINE SIZE GREATER THAN 90CC
- TAKE THE FREE HANDS-ON TRAINING COURSE OFFERED BY YAMAHA – ASK YOUR DEALER FOR DETAILS OR CALL 1-800-887-2887

If you have any questions about these points, **or if you purchased your ATV from an authorized Yamaha dealership and were not informed of the age recommendation for your ATV by the dealership,** please fill out the information below and mail this card to yamaha **today.**

Name:

Address:

Telephone:
( )

ATV Model:

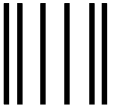
Purchase Date:
MO. DAY YR.

Primary I.D. (Engine Number):

Dealer Name & Address:

This is not a warranty card

READ CAREFULLY



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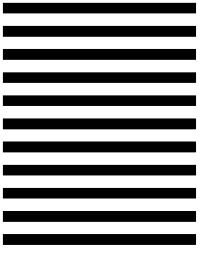
IN THE
UNITED STATES



BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 4 CYPRESS, CA

POSTAGE WILL BE PAID BY ADDRESSEE

YAMAHA MOTOR CORPORATION U.S.A.
P.O. BOX 6555
CYPRESS, CALIFORNIA 90630-9989

ATTN: SALES ADMINISTRATION